

حمل الآن

مجاناً وحصرياً

# امتحانات رقم (1)

## الترم الاول



**GEOMETRY – MODEL No 1****[Q1] Choose the correct answer:**

(1) The point of intersection of the medians of triangle divides each median in the ratio ..... from vertex.

- a) 1 : 2      b) 3 : 2      c) 2 : 3      d) 4 : 2

(2) In  $\triangle ABC$ , if  $m(\angle C) = 80^\circ$ ,  $m(\angle B) = 30^\circ$ , then  $AC$  .....  $BC$ .

- a) =      b) <      c) >      d)  $\leq$

(3) The axis of symmetry of a line segment is straight line .....

- a) Perpendicular to it      c) Parallel to it  
b) Bisects it      d) Perpendicular at midpoint

(4) In any triangle,  $XY + YZ - XZ$  ..... zero

- a) >      b) <      c) =      d)  $\leq$

(5) An isosceles triangle in which the lengths of two of its sides are 4 cm and 9 cm then the length of the third side equals .....

- a) 4      b) 5      c) 9      d) 13

**[Q2] Complete each of the following:**

1) If measure of an angle of an isosceles is  $60^\circ$ , then the triangle.....

2) The bisector of vertex in an isosceles triangle ....., .....

3) In  $\triangle XYZ$ , if  $m(\angle X) = 50^\circ$ ,  $m(\angle Y) = 60^\circ$ , then the triangle has .....  
Axes of symmetry

4) In isosceles triangle, if the measure of one of its base angles is  $40^\circ$ , then the measure of its vertex ..... $^\circ$

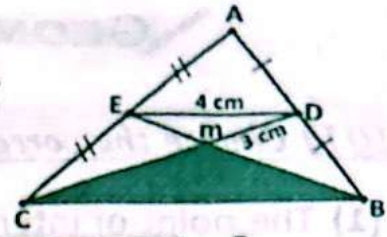


[Q3] A) In the opposite figure:

D, E are midpoints of  $\overline{AB}$ ,  $\overline{AC}$  respectively

$\overline{BE} \cap \overline{CD} = \{M\}$ . if  $DE = 4$  cm,  $DM = 3$  cm

$BE = 6$  cm. Find perimeter of  $\triangle BMC$

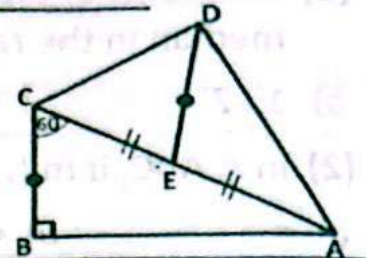


B) In the opposite figure:

$m(\angle B) = 90^\circ$ ,  $m(\angle ACB) = 60^\circ$

$\overline{DE}$  is median in  $\triangle DAC$ ,  $BC = DE$

Prove that:  $m(\angle ADC) = 90^\circ$

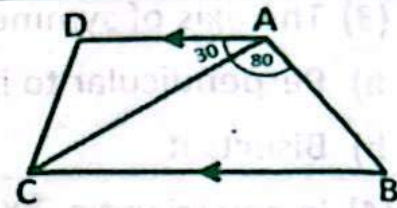


[Q4] A) In the opposite figure:

$\overline{AD} \parallel \overline{BC}$ ,  $m(\angle BAC) = 80^\circ$ ,

$m(\angle DAC) = 30^\circ$

Prove that:  $BC > AC$



B) In the opposite figure:

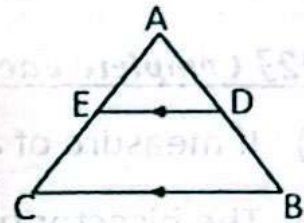
Arrange ascending the measures of  $\triangle ABC$  where:  $AC = 12$  cm,  $BC = 13$  cm, perimeter of  $\triangle ABC = 30$  cm

[Q5] A) In the opposite figure:

$\triangle ABC$ ,  $\overline{DE} \parallel \overline{BC}$ ,  $AD = AE$

Prove that:

①  $AB = AC$       ②  $DB = EC$

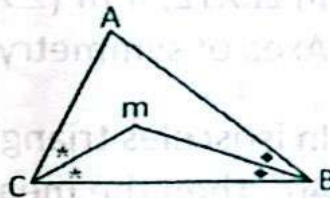


B) In the opposite figure:

$\triangle ABC$ ,  $AC > AB$

$\overline{BM}$  bisects  $(\angle ABC)$ ,  $\overline{CM}$  bisects  $(\angle ACB)$

Prove that:  $MC < MB$



◆◆◆  
End of the questions



**GEOMETRY – MODEL No 2****[Q1] Choose the correct answer:**

- (1) The length of two sides in an isosceles triangle are 4 cm , 9 cm, then the length of the third side = ..... cm  
 a) 4                      b) 5                      c) 9                      d) 13
- (2) If the measure of two angles in a triangle are  $55^\circ$  ,  $70^\circ$  , then the triangle is ..... triangle  
 a) Isosceles            b) Equilateral        c) Scalene            d) Obtuse
- (3) The measure of the exterior angle of an equilateral triangle = .... $^\circ$   
 a) 60                      b) 120                      c) 180                      d) 360
- (4) In  $\triangle ABC$ ,  $AC + BC - AB$  ..... zero  
 a)  $\leq$                       b)  $>$                       c)  $=$                       d)  $<$
- (5) The length of hypotenuse = ..... the length of the median whose drawn from the vertex of right angle  
 a) Half                      b) Third                      c) Quarter                      d) Twice

**[Q2] Complete each of the following:**

- 1) The intersecting point of the medians of triangle divide each of them with ratio 1 : ..... From the vertex.
- 2) In  $\triangle ABC$ ,  $AB = 6$  cm ,  $BC = 8$  cm,  $AC = 4$  cm, then  $m(\angle C) > m(\dots)$
- 3) If ABCD is a parallelogram,  $m(\angle A) + m(\angle C) = 110^\circ$ , then  $m(\angle D) = ..$
- 4) If the length of any side of a triangle =  $\frac{1}{3}$  perimeter of triangle, then the triangle has ..... axes of symmetry

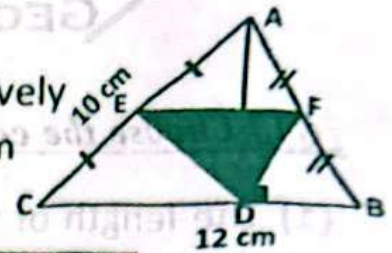


[Q3] A) In the opposite figure:

$\Delta ABC$ , F, E are midpoint of  $\overline{AB}$ ,  $\overline{AC}$  respectively

$\overline{AD} \perp \overline{BC}$ ,  $AB = 8$  cm,  $AC = 10$  cm,  $BC = 12$  cm

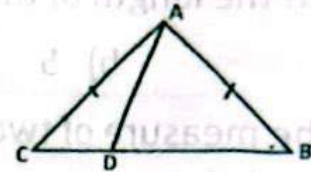
Find the perimeter of  $\Delta DFE$



B) In the opposite figure:

$AB = AC$ ,

Prove that:  $AB > AD$

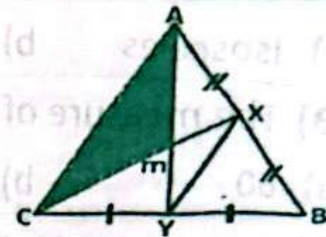


[Q4] A) In the opposite figure:

X, Y midpoints of  $\overline{AB}$ ,  $\overline{BC}$  respectively

$\overline{AY} \cap \overline{XC} = \{m\}$ ,  $XY = 6$  cm,  $MY = 4$  cm

$XC = 9$  cm. Find the perimeter of  $\Delta ABC$



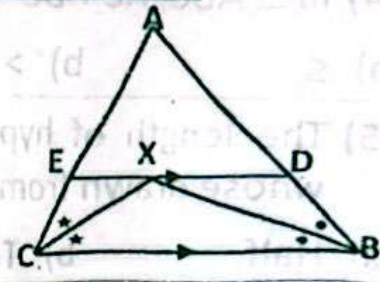
B) In the opposite figure:

$AB = 8$  cm,  $AC = 6$  cm

$\overline{DE} \parallel \overline{BC}$ ,  $\overline{BX}$  bisects  $\angle (DBC)$ ,

$\overline{CX}$  bisects  $\angle (BCE)$

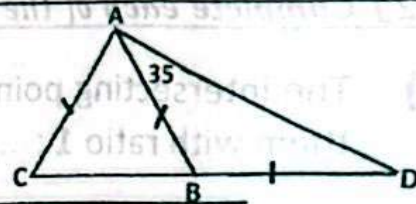
Find the area of  $\Delta ADE$



[Q5] A) In the opposite figure:

$AB = BC = AC$ ,  $m(\angle DAB) = 35^\circ$

Find by proof  $m(\angle BAC)$

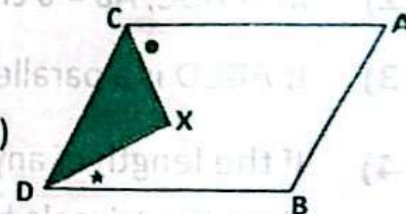


B) In the opposite figure:

ABCD is a parallelogram,

$\overline{XD}$  Bisects  $\angle (BDC)$ ,  $\overline{XC}$  Bisects  $\angle (ACD)$

Prove that:  $AB > XC$



End of the questions



**GEOMETRY – MODEL No 3****[01] Choose the correct answer:****(1)** In  $\triangle ABC$ ,  $\overline{AD}$  is median,  $m$  is concurrence point, then  $AM = \dots AD$ 

- a) 2                      b)  $\frac{1}{2}$                       c)  $\frac{1}{3}$                       d)  $\frac{2}{3}$

**(2)**  $\triangle XYZ$ ,  $XY = XZ$ , then the exterior angle at Vertex  $Z$  is .....

- a) Acute                      b) Right                      c) Obtuse                      d) Reflex

**(3)** A triangle its sides 4 cm, 7 cm,  $X$  cm, then  $X \in \dots$ 

- a)  $[3, 11]$                       b)  $]3, 11[$                       c)  $[3, 11[$                       d)  $]3, 11]$

**(4)** The triangle has two angles of measure  $50^\circ$ ,  $60^\circ$ , then the number of axes of symmetry .....

- a) Zero                      b) 1                      c) 2                      d) 3

**(5)** Length of hypotenuse = ..... the side opposite to  $30^\circ$ 

- a) 2                      b)  $\frac{1}{2}$                       c)  $\frac{1}{3}$                       d) 3

**[02] Complete each of the following:****1)** In  $\triangle ABC$ ,  $D$  is midpoint of  $\overline{BC}$ ,  $AD = \frac{1}{2} BC$ , then  $m(\angle A) = \dots$ **2)** The bisector of vertex of isosceles triangle bisects ..... and perpendicular to it.**3)** In  $\triangle ABC$ ,  $AB + BC > \dots$ **4)** If the vertically opposite angles are complementary, then the measure of each one = ..... $^\circ$ 

End of the questions

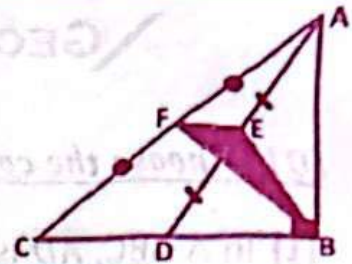


[Q3] A) In the opposite figure:

$M(\angle ABC) = 90^\circ$ , E midpoint of  $\overline{AD}$

F midpoint of  $\overline{AC}$ ,  $AD = 10$  cm,  $DC = 6$  cm

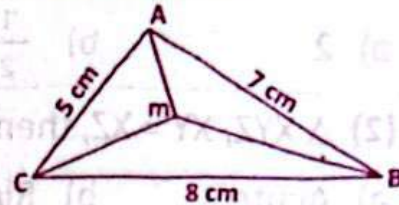
$AC = 12$  cm. find the perimeter of  $\triangle BEF$



B) In the opposite figure:

Prove that:

$MB + MA + MC > 10$  cm



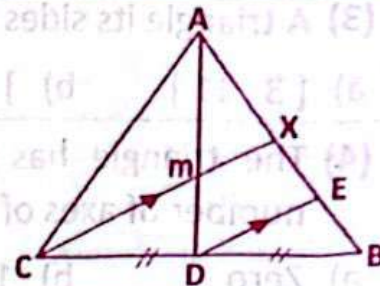
[Q4] A) In the opposite figure:

D is midpoint of BC,  $\overline{AD} \cap \overline{CX} = \{m\}$

$AM : MD = 2 : 1$ ,  $\overline{DE} \parallel \overline{XC}$

If  $XM = 6$  cm

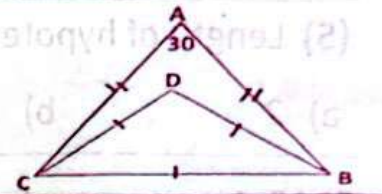
Find the length of  $\overline{DE}$ ?



B) In the opposite figure:

$BD = DC = CB$ ,  $AB = AC$

$M(\angle BAC) = 30^\circ$ , Find the  $m(\angle ABD)$ ?

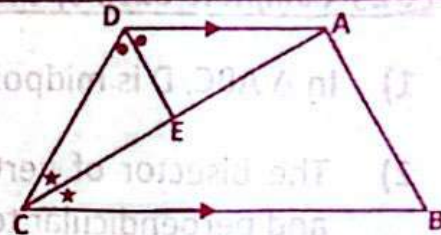


[Q5] A) In the opposite figure:

$\overline{AD} \parallel \overline{BC}$ ,  $\overline{DE}$  bisects  $(\angle ADC)$ ,

$\overline{CA}$  bisects  $(\angle BCD)$ , Prove that:

① E midpoint of  $\overline{AC}$       ②  $\overline{DE} \perp \overline{AC}$

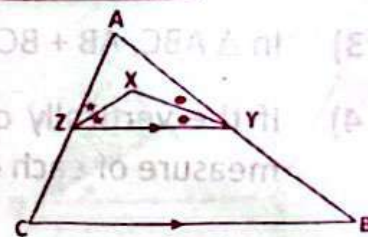


B) In the opposite figure:

$AB > AC$ ,  $\overline{YZ} \parallel \overline{BC}$ ,  $\overline{XY}$  bisects  $\angle (AYZ)$

$\overline{XZ}$  bisects  $(\angle AZY)$ .

Prove that:  $XY > XZ$



◆ ◆ ◆  
(End of the questions



**GEOMETRY – MODEL NO 4****[Q1] Choose the correct answer:****(1)**  $\overline{AD}$  is a median in  $\triangle ABC$ ,  $AD = \frac{1}{2} BC$ , then  $\angle A$  is .....

- a) Acute                      b) Obtuse                      c) Right                      d) Straight

**(2)** The measure of exterior angle of an equilateral triangle = ..... $^{\circ}$ 

- a) 60                      b) 90                      c) 120                      d) 180

**(3)** If the length of any side of triangle =  $\frac{1}{3}$  its perimeter, then the number of axes of symmetry of this triangle is .....

- a) Zero                      b) 1                      c) 2                      d) 3

**(4)** In  $\triangle ABC$ ,  $AB + BC - CA > \dots\dots\dots$ 

- a) Zero                      b) 1                      c) 2                      d) 3

**(5)** ABCD is a rhombus,  $AC > BD$ , then  $m(\angle D) \dots\dots\dots m(\angle C)$ 

- a)  $>$                       b)  $=$                       c)  $<$                       d)  $\leq$

**[Q2] Complete each of the following:****1)** If 5, 7, X are lengths of triangle sides, then  $X \in ] \dots\dots\dots , \dots\dots\dots [$ **2)** The bisector of the vertex angle of an isosceles triangle.....**3)** In  $\triangle ABC$ ,  $AB = AC$ ,  $m(\angle A) = 3 m(\angle B)$ , then  $m(\angle C) = \dots\dots\dots^{\circ}$ **4)** In  $\triangle ABC$  if  $\overline{AB} \perp \overline{BC}$  and  $AB = BC$  then  $m(\angle A) = \dots\dots\dots^{\circ}$

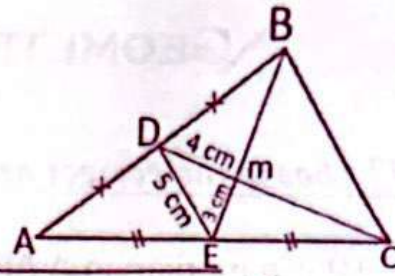


[Q3] **A) In the opposite figure:**

M is intersection point of medians

$ME = 3 \text{ cm}$ ,  $MD = 4 \text{ cm}$ ,  $DE = 5 \text{ cm}$ .

Find the perimeter of  $\triangle MBC$

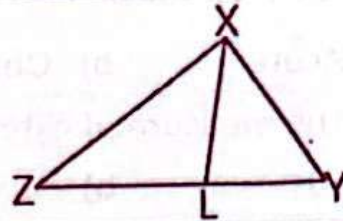


**B) In the opposite figure:**

In  $\triangle XYZ$ ,  $L \in YZ$

Prove that:

Perimeter of  $\triangle XYZ > 2 \times XL$

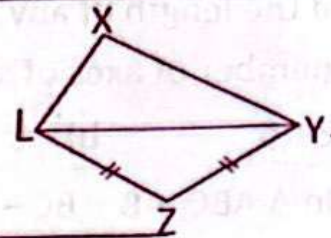


[Q4] **A) In the opposite figure:**

$XY > XL$ ,  $ZY = ZL$

Prove that:

$m(\angle XLZ) > m(\angle XYZ)$

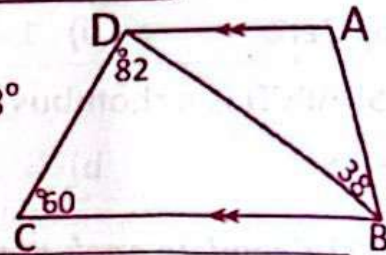


**B) In the opposite figure:**

$\overline{AD} \parallel \overline{BC}$ ,  $m(\angle BCD) = 82^\circ$ ,  $m(\angle ABD) = 38^\circ$

$m(\angle BCD) = 60^\circ$ . Prove that:

$\triangle ABD$  is an isosceles triangle

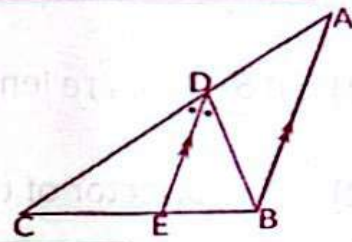


[Q5] **A) In the opposite figure:**

If  $\overline{DE} \parallel \overline{AB}$

$\overline{DE}$  Bisects  $\angle BDC$

Prove that:  $AC > BC$

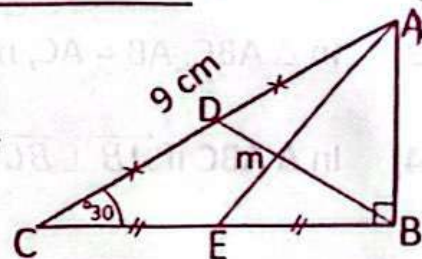


**B) In the opposite figure:**

$\triangle ABC$  is right at B,  $m(\angle C) = 30^\circ$ ,

D is midpoint of  $\overline{AC}$ , E is midpoint of  $\overline{BC}$

$AC = 9 \text{ cm}$ . Find length of  $\overline{BM}$ ,  $\overline{AB}$



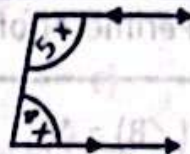
◆ ◆ ◆  
(End of the questions



# GEOMETRY – MODEL NO 5

[Q1] Choose the correct answer:

- (1)  $\overline{AD}$  is a median in  $\triangle ABC$ ,  $AD = \frac{1}{2} BC$ , then  $(\angle A)$  is .....  
 a) Acute      b) Right      c) Reflex      d) obtuse
- (2) If  $D \in$  axis of symmetry of  $\overline{AB}$ , then  $AD$  .....  $BD$   
 a)  $\perp$       b)  $=$       c)  $>$       d)  $<$
- (3) The triangle with sides 2 cm,  $(X+3)$  cm, 5 cm is isosceles triangle when  $x =$ .....  
 a) -1      b) 2      c) 3      d) 4
- (4) The sum of measures of exterior angles for equilateral triangle =  
 a)  $60^\circ$       b)  $120^\circ$       c)  $180^\circ$       d)  $360^\circ$
- (5) In the opposite figure:  
 $X =$ ..... $^\circ$
- a) 20      b) 40      c) 90      d) 180



[Q2] Complete each of the following:

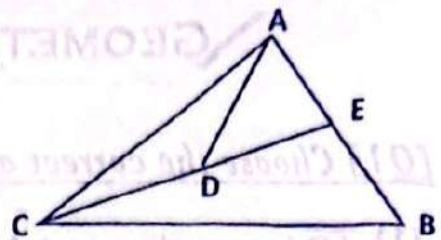
- 1) If 3, 4,  $x + 2$  are sides lengths of a triangle, then  $X \in ] \dots, \dots [$
- 2)  $\triangle ABC$ ,  $AB = AC$ ,  $m(\angle A) = 60^\circ$  and its perimeter = 12 cm, then  
 $BC =$  .....
- 3) In  $\triangle ABC$ ,  $m(\angle B) = 90^\circ$ ,  $m(\angle A) = 30^\circ$ , then  $AC =$  .....  $BC$
- 4) The bisector of the vertex angle in isosceles triangle bisect the  
 base and .....



[Q3] A) In the opposite figure:

$$AD = CD = ED$$

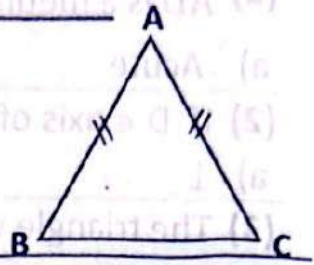
Prove that:  $BC > AC$



B) In the opposite figure:

$$AB = AC, m(\angle A) = x, m(\angle B) = 2x$$

Find  $m(\angle C)$  in degree.

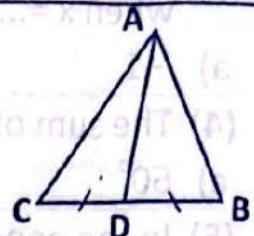


[Q4] A) In the opposite figure:

$\triangle ABC$ , D is a midpoint of  $\overline{BC}$

Prove that:

Perimeter of  $\triangle ADC >$  Perimeter of  $\triangle ABD$



B)  $\triangle ABC$ ,  $m(\angle A) = 75^\circ$ ,  $m(\angle B) = 40^\circ$ .

Arrange descending the sides' length of triangle ABC.

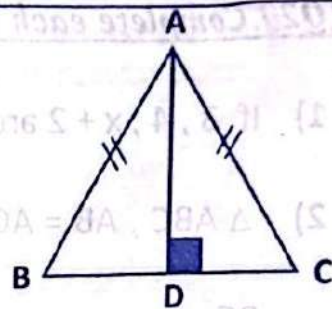
[Q5] A) In the opposite figure:

$$AB = AC, \overline{AD} \perp \overline{BC}, AB = 13 \text{ cm}$$

$$BC = 10 \text{ cm},$$

Find: ① Length of  $\overline{BD}$

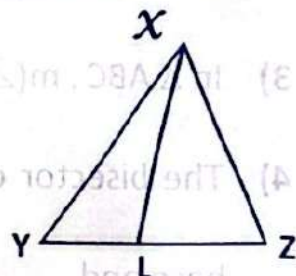
② Area of  $\triangle ABC$



B) In the opposite figure:

Prove that:

Perimeter of  $\triangle XYZ > 2 \cdot XL$



◆◆◆  
(End of the questions)



**GEOMETRY – MODEL No 6**

**[Q1] Choose the correct answer:**

(1) The number of axes of symmetry of isosceles triangle = .....

- a) Zero                      b) 1                      c) 2                      d) 3

(2) In  $\triangle ABC$ ,  $m(\angle A) + m(\angle B) < m(\angle C)$ , then  $AB$  ....  $BC$

- a)  $<$                       b)  $=$                       c)  $>$                       d)  $\leq$

(3) In  $\triangle ABC$ ,  $m(\angle C) = 65^\circ$ ,  $m(\angle A) = 75^\circ$  then ..

- a)  $AB > BC$                       b)  $AB < AC$                       c)  $BC > AB$                       d)  $AB = AC$

(4) If  $M$  is the point of intersection of medians of  $\triangle ABC$ ,  $D$  is midpoint of  $BC$ , then  $AD =$  .....

- a)  $2 AM$                       b)  $4 MD$                       c)  $\frac{2}{3} MD$                       d)  $\frac{1}{2} AM$

(5) The set of numbers can be lengths of sides of triangle are .....

- a)  $\{4, 6, 10\}$                       b)  $\{4, 6, 8\}$                       c)  $\{2, 6, 3\}$                       d)  $\{4, 5, 10\}$

**[Q2] Complete each of the following:**

1) In the isosceles triangle, if  $AB = AC$ ,  $m(\angle A) = 70^\circ$ , then  $AB < \dots$

2) In  $\triangle ABC$ , if  $m(\angle A) = 30^\circ$  and  $m(\angle B) = 90^\circ$ , then  $BC = \dots AC$

3) If the measure of the vertex angle of an isosceles triangle is  $80^\circ$ , then the measure of each of two base angle equal .....

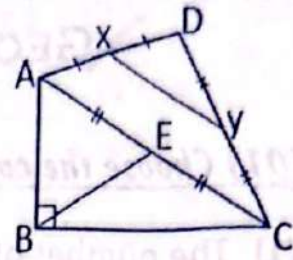
4) The measure of the exterior angle of the equilateral  $\triangle =$  .....

**[Q3] A) In the opposite figure:**

X is midpoint of  $\overline{AD}$ , Y is midpoint of  $\overline{CD}$

E is midpoint of  $\overline{AC}$ ,  $m(\angle ABC) = 90^\circ$

$XY = 6$  cm. Find length of  $\overline{BE}$

**B)  $\triangle ABC$ ,  $D \in \overline{BC}$ ,  $AD = AC$** 

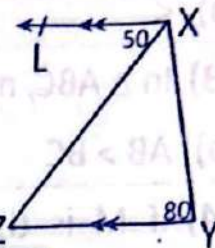
Prove that:  $AB > AD$

**[Q4] A) In the opposite figure:**

$XL \parallel YZ$ ,  $m(\angle Y) = 80^\circ$

$m(\angle LXZ) = 50^\circ$

Prove that:  $XY = YZ$

**B) In the opposite figure:**

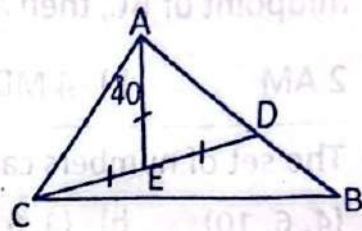
$DE = EC = AE$

$m(\angle EAC) = 40^\circ$

Prove that:

①  $AC > AE$

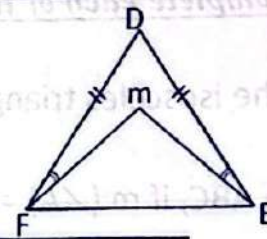
②  $AC < BC$

**[Q5] A) In the opposite figure:**

If  $DE = DF$ ,  $m(\angle DEM) = m(\angle DFM)$

Prove that:

$\overrightarrow{DM}$  is axis of symmetry of  $\overline{EF}$

**B) ABCD is a parallelogram, its diagonal intersect at M, draw  $\overline{BX}$  median in  $\triangle ABD$  cut  $\overline{AD}$  in X,  $\overline{AC}$  in N**

Prove that:  $AN = \frac{1}{3} AC$

◆◆◆  
(End of the questions)



# GEOMETRY – MODEL NO 2

**[01] Choose the correct answer:**

(1) The number of axes of symmetry of equilateral triangle = .....

- a) 3                      b) 2                      c) 1                      d) Zero

(2) The set of numbers which can be lengths of sides of triangle are

- a) {5, 3, 8}              b) {4, 6, 12}              c) {2, 6, 3}              d) {3, 5, 5}

(3) In  $\triangle ABC$ ,  $m(\angle C) = 65^\circ$ ,  $m(\angle A) = 75^\circ$  then ....

- a)  $AB > BC$               b)  $AB < AC$               c)  $BC > AB$               d)  $AB = AC$

(4) If  $XA = XB$  and  $YA = YB$ , then  $\overline{XY} \dots\dots\dots \overline{AB}$

- a)  $//$                       b)  $\perp$                       c)  $\equiv$                       d)  $=$

(5) In  $\triangle ABC$ , if  $m(\angle B) = 90^\circ$ , D is midpoint of  $\overline{AC}$ , then  $AC = \dots\dots\dots$

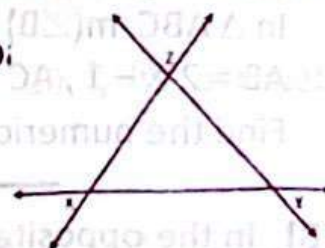
- a) 2 BD                      b) 4 BD                      c)  $\frac{1}{2}$  BD                      d)  $\frac{1}{3}$  AD

**[02] Complete each of the following:**

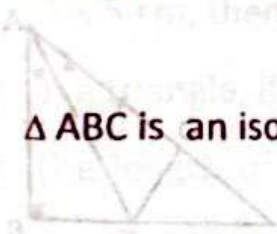
1) The longest side in the right angled triangle is .....

2) The point of intersection of the medians of the triangle divides each median in the ratio 4 : ..... from the b

3) In opposite figure  $X+Y+Z = \dots\dots\dots^\circ$



4)  $\triangle ABC$  is an isosceles triangle,  $m(\angle B) = 100^\circ$  then  $m(\angle A) = \dots\dots^\circ$



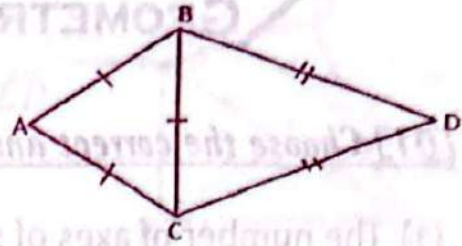


[Q3] [A] In the opposite figure

$$AB = AC = BC, BD = DC$$

$$, m(\angle ABD) = 130^\circ,$$

Find  $m(\angle D)$

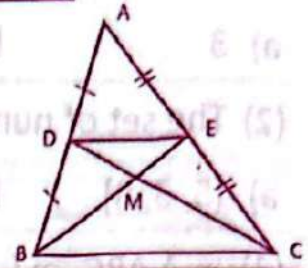


[B] In the opposite figure

D is midpoint of  $\overline{AB}$ , E is midpoint of  $\overline{AC}$

$$BM = 4 \text{ cm}, MC = 6 \text{ cm}, BC = 8 \text{ cm}$$

Find the perimeter of  $\triangle DME$



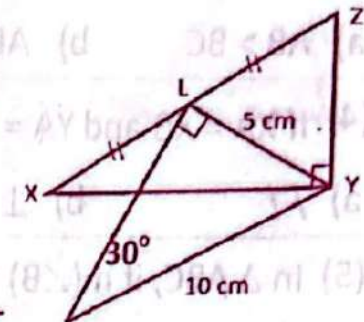
[Q4] [A] In the opposite figure

$$m(\angle XYZ) = m(\angle HLY) = 90^\circ$$

$$, m(\angle H) = 30^\circ, LY = 5 \text{ cm}, HY = 10 \text{ cm}$$

L is midpoint of  $\overline{XZ}$

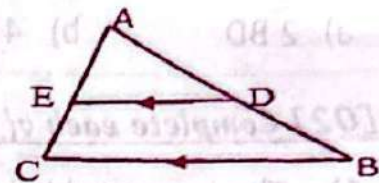
Find the length of  $\overline{XZ}$



[B] In the opposite figure

$$AB > AC, \overline{ED} \parallel \overline{BC}$$

Prove that:  $AD > AE$

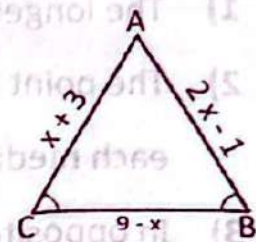


[Q5] [A] In the opposite figure

$$\text{In } \triangle ABC, m(\angle B) = m(\angle C)$$

$$AB = 2X - 1, AC = X + 3, BC = 9 - X$$

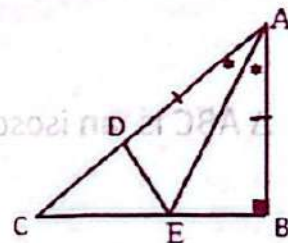
Find the numerical value of perimeter of  $\triangle ABC$



[B] In the opposite figure

$$AB = AD, \overline{AE} \text{ bisects } \angle BAC$$

$$, m(\angle ABC) = 90^\circ, \text{ Prove that } CE > EB$$



◆◆◆

End of the questions



**GEOMETRY — MODEL No 8****[Q1] Choose the correct answer:**

(1) If  $\Delta ABC$  is right angled triangle at B,  $AC = 10$  cm,  $BC = 8$  cm, then the length of the median drawn from B = ..... cm

- a) 5                      b) 6                      c) 8                      d) 10

(2) The point of intersection of the medians of triangle divides each of them with the ratio of .....from the base

- a) 1 : 2                      b) 2 : 1                      c) 1 : 3                      d) 3 : 1

(3)  $\overline{AD}$  is median in  $\Delta ABC$ , m is intersection point of its medians,  $AD = 6$  cm, then  $AM =$  ..... cm

- a) 1                      b) 2                      c) 3                      d) 4

(4) If the length of two sides of an isosceles triangle are 3 , 7 cm. then the length of the third side = ..... cm

- a) 3                      b) 4                      c) 7                      d) 10

(5) In  $\Delta ABC$ ,  $m(\angle B) = 70^\circ$ ,  $m(\angle C) = 50^\circ$ , then  $BC$  .....  $AC$

- a)  $>$                       b)  $=$                       c)  $<$                       d)  $\leq$

**[Q2] Complete each of the following:**

1)  $ABC$ ,  $BC = AC$ ,  $m(\angle A) = 2 m(\angle C)$ , then  $m(\angle B) =$  .....

2) An isosceles triangle with vertex angle  $= 60^\circ$ , its perimeter

$3\sqrt{5}$  cm, then its side length .....

3) In a triangle, If its side lengths is 2 , 4,  $X + 1$  then  $X \in ]$  ....., ....[

4) The length of two sides in the triangle are not equal, then the greater side in length is opposite to .....

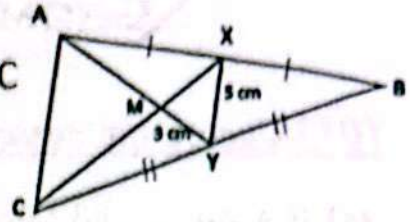


[Q3] A) In the opposite figure:

M is the intersection of the medians of  $\triangle ABC$

$XY = 5$  cm,  $CX = 12$  cm,  $MY = 3$  cm.

Find with prove the perimeter of  $\triangle MAC$

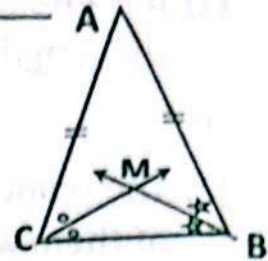


B) In the opposite figure:

$\triangle ABC$ ,  $AB = AC$ ,  $\overline{BM}$  bisect  $(\angle B)$ ,

$\overline{CM}$  bisect  $(\angle C)$ , without using the congruency

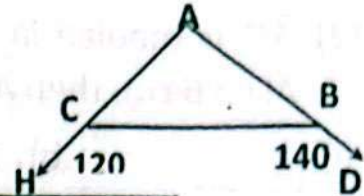
Prove that:  $\overline{AM}$  is the axis of symmetry of  $\overline{BC}$



[Q4] A) In the opposite figure:

$\triangle ABC$ ,  $D \in \overline{AB}$ ,  $H \in \overline{AC}$ ,  $m(\angle CBD) = 140^\circ$

$m(\angle BCH) = 120^\circ$ . Prove that  $BC > AB$



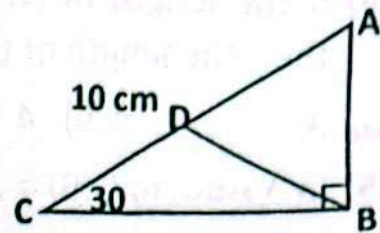
B) In the opposite figure:

$\triangle ABC$  right angled triangle at B

D is midpoint of  $\overline{AC}$ ,  $AC = 10$  cm,

$m(\angle C) = 30^\circ$ .

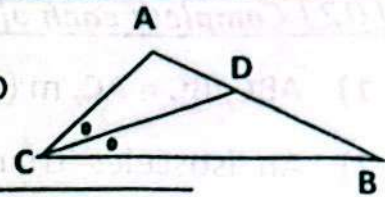
Calculate the perimeter of  $\triangle ADB$



[Q5] A) In the opposite figure:

$\triangle ABC$ ,  $\overline{CD}$  bisect  $(\angle C)$  and intersect  $\overline{AB}$  in D

Prove that:  $BC > BD$

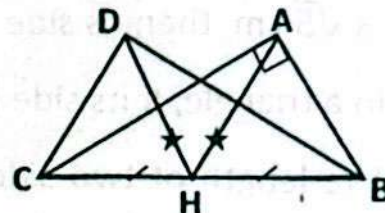


B) In the opposite figure:

$\triangle ABC$  right angled triangle at A

H is midpoint of  $\overline{BC}$ ,  $AH = DH$

Prove that:  $m(\angle BDC) = 90^\circ$



◆ ◆ ◆  
'End of the questions



## GEOMETRY — MODEL No 9

[Q1] Choose the correct answer:

- (1) The triangle which has three axes of symmetry is .....
  - a) scalene
  - b) isosceles
  - c) Right angled
  - d) equilateral
- (2) If the lengths of two sides in an isosceles triangle are 8 cm and 4 cm then the length of the third side is ..... cm
  - a) 4
  - b) 8
  - c) 3
  - d) 12
- (3) In  $\triangle XYZ$ ,  $m(\angle Z) = 70^\circ$ ,  $m(\angle Y) = 60^\circ$  then  $YZ$  .....  $XY$ 
  - a)  $>$
  - b)  $<$
  - c)  $=$
  - d) Twice
- (4) If  $XA = XB$  and  $YA = YB$ , then  $\overleftrightarrow{XY}$  .....  $\overline{AB}$ 
  - a)  $//$
  - b)  $\perp$
  - c)  $\equiv$
  - d)  $=$
- (5) If  $M$  is the point of intersection of medians of  $\triangle ABC$ ,  $D$  is midpoint of  $\overline{BC}$ , then  $AD =$ 
  - a)  $2 AM$
  - b)  $4 MD$
  - c)  $\frac{2}{3} MD$
  - d)  $\frac{3}{2} AM$

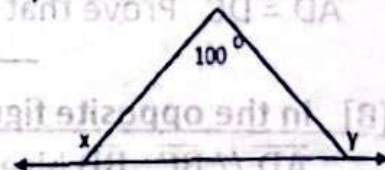
[Q2] Complete each of the following:

- 1) In  $\triangle ABC$ , if  $AB = AC$ ,  $m(\angle A) = 70^\circ$ , then  $AB <$  .....
- 2) In  $\triangle ABC$ , if  $m(\angle A) = 30^\circ$  and  $m(\angle B) = 90^\circ$ , then  $BC =$  .....  $AC$

3) In opposite figure:

$X + y = \dots\dots\dots^\circ$

- 4) If the measure of the vertex angle of an isosceles triangle is  $80^\circ$ , then the measure of each of two base angles = .....



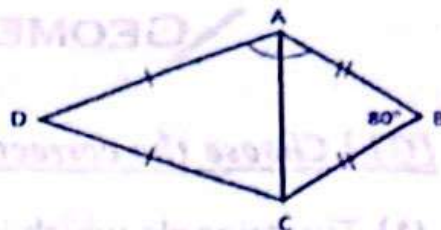


[Q3] [A] In the opposite figure

$$AD = DC, AB = BC$$

$$m(\angle B) = 80^\circ, m(\angle BAD) = 114^\circ$$

Find  $m(\angle D)$

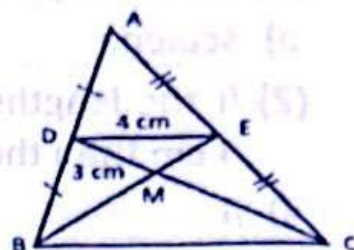


[B] In the opposite figure

D is midpoint of  $\overline{AB}$ , E is midpoint of  $\overline{AC}$

$$DE = 4 \text{ cm}, DM = 3 \text{ cm}, BE = 6 \text{ cm}$$

Find the perimeter of  $\triangle BMC$



[Q4] [A] In the opposite figure

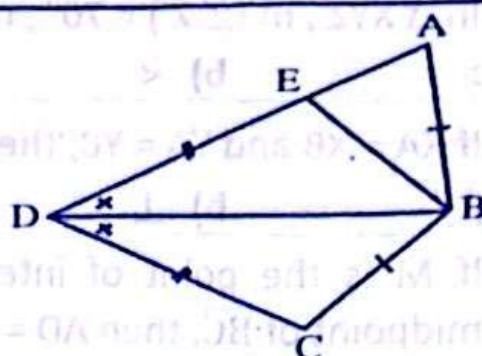
In the opposite figure

$$BA = BC \text{ and } DE = DC,$$

$\overline{DB}$  bisects  $\angle ADC$

Prove that:

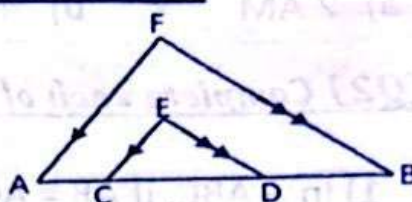
$$(\angle A) + m(\angle C) = 180^\circ$$



[B] In the opposite figure

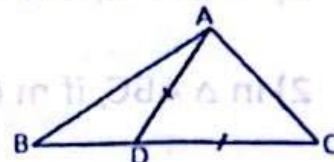
$$BF > FA, \overline{ED} \parallel \overline{FB}, \overline{FA} \parallel \overline{EC}$$

Prove that:  $ED > EC$



[Q5] [A] In the opposite figure

$$AD = DC \text{ Prove that } BC > AB$$

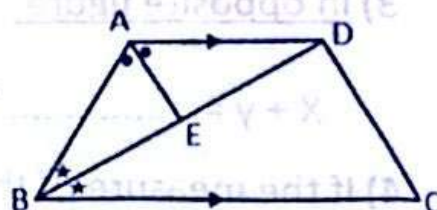


[B] In the opposite figure

$\overline{AD} \parallel \overline{BC}$ ,  $\overline{BD}$  bisects  $\angle ABC$

$\overline{AE}$  bisects  $\angle BAD$

Prove that:  $\overline{AE} \perp \overline{BD}$



◆◆◆  
(End of the questions



# كيفية طباعة صفحات معينة من ملف معين

## مثلا ازاي نطبع الصفحات من صفحة 4 الى صفحة 9



خطوة 1



خطوة 2  
اختيار اسم  
الطابعة  
بتاعتك

خطوة 3  
كتابة الصفحات  
المراد طباعتها  
نكتب رقم 4 ثم  
نكتب الشرطة  
دي - ثم نكتب 9

خطوة 4  
اختيار نوع الورق



خطوة 5  
اختيار A4



خطوة 6



حمل الآن

مجاناً وحصرياً

# امتحانات رقم (2)

## الترم الاول





**GEOMETRY – MODEL No****1****Q1** Choose the correct answer:

- (1) The length of two sides in an isosceles triangle are 4 cm , 9 cm, then the length of the third side = ..... cm  
a) 4                      b) 5                      c) 9                      d) 13
- (2) If the measure of two angles in a triangle are  $55^\circ$  ,  $70^\circ$  , then the triangle is ..... triangle  
a) Isosceles              b) Equilateral              c) Scalene              d) Obtuse
- (3) The measure of the exterior angle of an equilateral triangle= .... $^\circ$   
a) 60                      b) 120                      c) 180                      d) 360
- (4) In  $\triangle ABC$ ,  $AC + BC - AB$  ..... zero  
a)  $\leq$                       b)  $>$                       c)  $=$                       d)  $<$
- (5) The length of hypotenuse = ..... the length of the median whose drawn from the vertex of right angle  
a) Half                      b) Third                      c) Quarter                      d) Twice
- (6) If  $X \in$  axis of symmetry of  $\overline{BC}$ , then  $\overline{XB}$  .....  $\overline{XC}$   
a)  $>$                       b)  $=$                       c)  $<$                       d)  $\equiv$

**Q2** Complete each of the following:

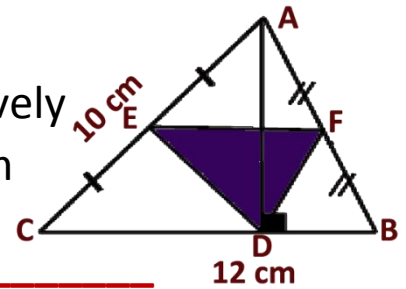
- 1) The intersecting point of the medians of triangle divide each of them with ratio **1** : ..... From the vertex.
- 2) In  $\triangle ABC$ ,  $AB = 6$  cm ,  $BC = 8$  cm,  $AC = 4$  cm, then  $m(\angle C) > m(\dots)$
- 3) The longest side in the right angled-triangle is .....
- 4) If ABCD is a parallelogram,  $m(\angle A) + m(\angle C) = 110^\circ$ , then  $m(\angle D) = ..$
- 5) If the length of any side of a triangle =  $\frac{1}{3}$  perimeter of triangle, then the triangle has ..... axes of symmetry

**Q3 A) In the opposite figure:**

$\triangle ABC$ , F, E are midpoint of  $\overline{AB}$ ,  $\overline{AC}$  respectively

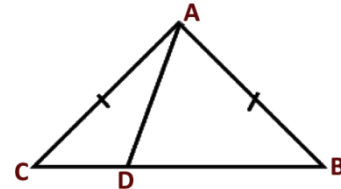
$\overline{AD} \perp \overline{BC}$ ,  $AB = 8$  cm,  $AC = 10$  cm,  $BC = 12$  cm

Find the perimeter of  $\triangle DFE$

**B) In the opposite figure:**

$AB = AC$ ,

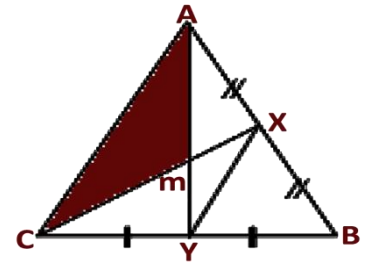
**Prove that:**  $AB > AD$

**Q4 A) In the opposite figure:**

X, Y midpoints of  $\overline{AB}$ ,  $\overline{BC}$  respectively

$\overline{AY} \cap \overline{XC} = \{m\}$ ,  $XY = 6$  cm,  $MY = 4$  cm

$XC = 9$  cm. Find the perimeter of  $\triangle ABC$

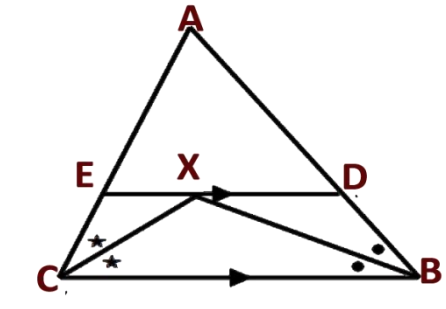
**B) In the opposite figure:**

$AB = 8$  cm,  $AC = 6$  cm

$\overline{DE} \parallel \overline{BC}$ ,  $\overline{BX}$  bisects  $\angle (DBC)$ ,

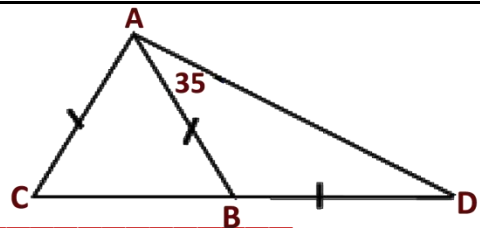
$\overline{CX}$  bisects  $\angle (BCE)$

Find the area of  $\triangle ADE$

**Q5 A) In the opposite figure:**

$AB = BC = AC$ ,  $m(\angle DAB) = 35^\circ$

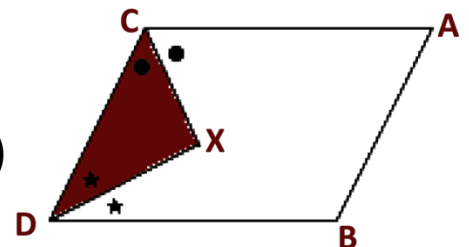
Find by proof  $m(\angle BAC)$

**B) In the opposite figure:**

ABCD is a parallelogram,

$\overline{XD}$  Bisects  $\angle (BDC)$ ,  $\overline{XC}$  Bisects  $\angle (ACD)$

**Prove that:**  $AB > XC$



End of the questions



**GEOMETRY – MODEL No****2****Q1** Choose the correct answer:

(1) In  $\triangle ABC$ ,  $\overline{AD}$  is median,  $m$  is concurrence point, then  $AM = \dots AD$

- a) 2                      b)  $\frac{1}{2}$                       c)  $\frac{1}{3}$                       d)  $\frac{2}{3}$

(2)  $\triangle XYZ$ ,  $XY = XZ$ , then the exterior angle at Vertex **Z** is .....

- a) Acute                      b) Right                      c) Obtuse                      d) Reflex

(3) A triangle its sides **4** cm, **7** cm, **X** cm, then  $X \in \dots$

- a)  $[3, 11]$                       b)  $]3, 11[$                       c)  $[3, 11[$                       d)  $]3, 11]$

(4) The triangle has two angles of measure  **$50^\circ$** ,  **$60^\circ$** , then the number of axes of symmetry .....

- a) Zero                      b) 1                      c) 2                      d) 3

(5) Length of hypotenuse = ..... the side opposite to  **$30^\circ$**

- a) 2                      b)  $\frac{1}{2}$                       c)  $\frac{1}{3}$                       d) 3

(6) In  $\triangle ABC$ ,  $AB = AC$ ,  $m(\angle A) = 50^\circ$ . then  $BC \dots AB$

- a)  $<$                       b)  $=$                       c)  $>$                       d)  $\equiv$

**Q2** Complete each of the following:

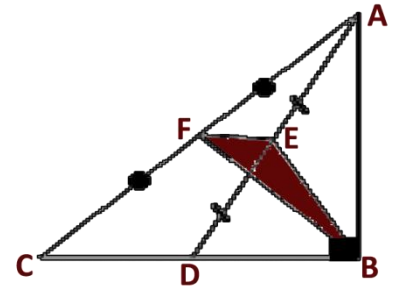
- In  $\triangle ABC$ , D is midpoint of  $\overline{BC}$ ,  $AD = \frac{1}{2} BC$ , then  $m(\angle A) = \dots$
- The bisector of vertex of isosceles triangle bisects ..... and perpendicular to it.
- In  $\triangle ABC$ ,  $AB + BC > \dots$
- If the vertically opposite angles are complementary, then the measure of each one = ..... $^\circ$
- The axis of symmetry of a line segment is straight line .....

**Q3 A) In the opposite figure:**

$M(\angle ABC) = 90^\circ$ , E midpoint of  $\overline{AD}$

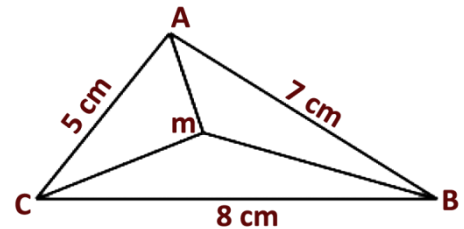
F midpoint of  $\overline{AC}$ ,  $AD = 10$  cm,  $DC = 6$  cm

$AC = 12$  cm. **find the perimeter of  $\triangle BEF$**

**B) In the opposite figure:**

Prove that:

$$MB + MA + MC > 10 \text{ cm}$$

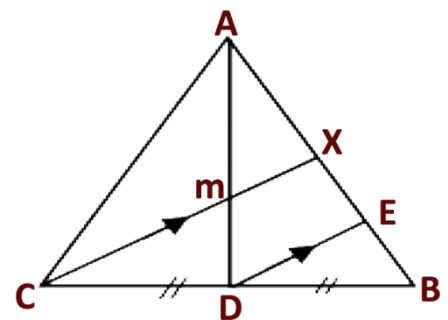
**Q4 A) In the opposite figure:**

D is midpoint of BC,  $\overline{AD} \cap \overline{CX} = \{m\}$

$AM : MD = 2 : 1$ ,  $\overline{DE} \parallel \overline{XC}$

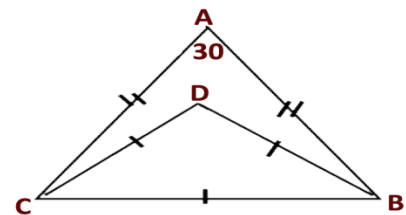
If  $XM = 6$  cm

**Find the length of  $\overline{DE}$**

**B) In the opposite figure:**

$BD = DC = CB$ ,  $AB = AC$

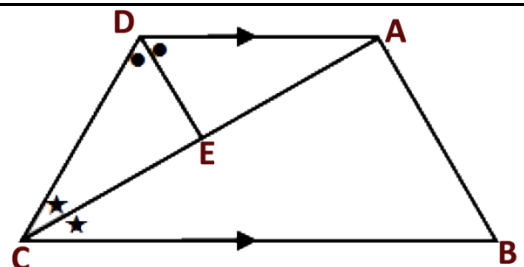
$M(\angle BAC) = 30^\circ$ , **Find the  $m(\angle ABD)$**

**Q5 A) In the opposite figure:**

$\overline{AD} \parallel \overline{BC}$ ,  $\overline{DE}$  bisects  $(\angle ADC)$ ,

$\overline{CA}$  bisects  $(\angle BCD)$ , **Prove that:**

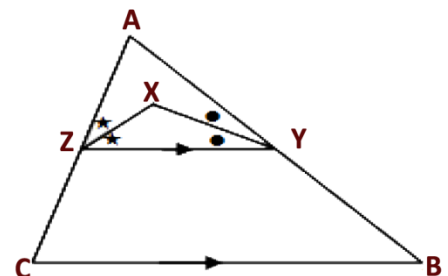
① E midpoint of  $\overline{AC}$       ②  $\overline{DE} \perp \overline{AC}$

**B) In the opposite figure:**

$AB > AC$ ,  $\overline{YZ} \parallel \overline{BC}$ ,  $\overline{XY}$  bisects  $\angle (AYZ)$

$\overline{XZ}$  bisects  $(\angle AZY)$ .

**Prove that:  $XY > XZ$**



◆◆◆  
End of the questions



**GEOMETRY – MODEL No****3****Q1** Choose the correct answer:

(1)  $\overline{AD}$  is a median in  $\triangle ABC$ ,  $AD = \frac{1}{2} BC$ , then  $\angle A$  is .....

- a) Acute                      b) Obtuse                      c) Right                      d) Straight

(2) The measure of exterior angle of an equilateral triangle = ..... $^{\circ}$

- a) 60                      b) 90                      c) 120                      d) 180

(3) If the length of any side of triangle =  $\frac{1}{3}$  its perimeter, then the number of axes of symmetry of this triangle is .....

- a) Zero                      b) 1                      c) 2                      d) 3

(4) In  $\triangle ABC$ ,  $AB + BC - CA > \dots\dots\dots$

- a) Zero                      b) 1                      c) 2                      d) 3

(5) ABCD is a rhombus,  $AC > BD$ , then  $m(\angle D) \dots\dots\dots m(\angle C)$

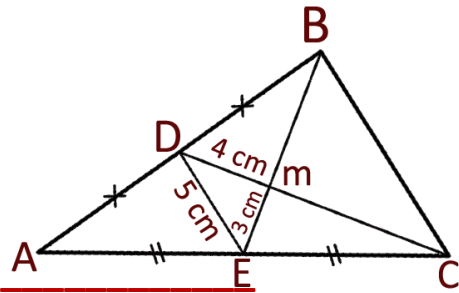
- a)  $>$                       b)  $=$                       c)  $<$                       d)  $\leq$

**Q2** Complete each of the following:

- 1) If 5 , 7 , X are lengths of triangle sides, then  $X \in ] \dots\dots\dots , \dots\dots\dots [$
- 2) Any point lies on axis of symmetry of a line segment is .....  
From its terminals.
- 3) If the measures of two angles are different then the greatest in measure is opposite to a side of .....
- 4) The bisector of the vertex angle of an isosceles triangle.....
- 5) In  $\triangle ABC$ ,  $AB = AC$ ,  $m(\angle A) = 3 m(\angle B)$ , then  $m(\angle C) = \dots\dots\dots^{\circ}$
- 6) In  $\triangle ABC$  if  $\overline{AB} \perp \overline{BC}$  and  $AB = BC$  then  $m(\angle A) = \dots\dots\dots^{\circ}$

**Q3 A) In the opposite figure:**

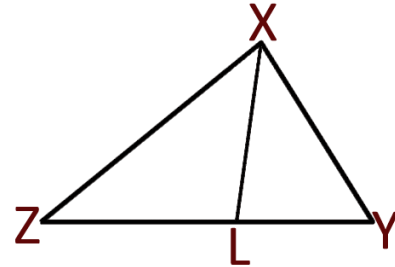
M is intersection point of medians  
 $ME = 3$  cm,  $MD = 4$  cm,  $DE = 5$  cm.  
 Find the perimeter of  $\triangle MBC$

**B) In the opposite figure:**

In  $\triangle XYZ$ ,  $L \in YZ$

**Prove that:**

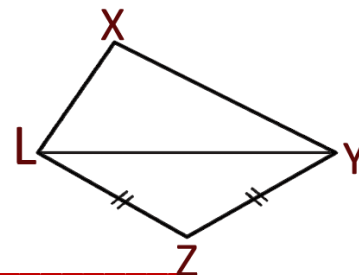
Perimeter of  $\triangle XYZ > 2 \times XL$

**Q4 A) In the opposite figure:**

$XY > XL$ ,  $ZY = ZL$

**Prove that:**

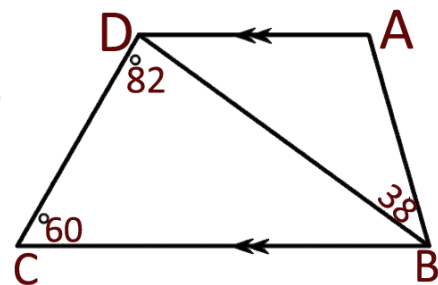
$m(\angle XLZ) > m(\angle XYZ)$

**B) In the opposite figure:**

$AD \parallel BC$ ,  $m(\angle BCD) = 82^\circ$ ,  $m(\angle ABD) = 38^\circ$

$m(\angle BCD) = 60^\circ$ . **Prove that:**

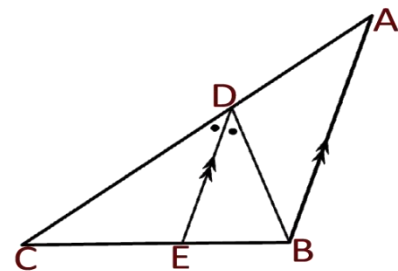
$\triangle ABD$  is an isosceles triangle

**Q5 A) In the opposite figure:**

If  $\overline{DE} \parallel \overline{AB}$

$\overline{DE}$  Bisects  $\angle BDC$

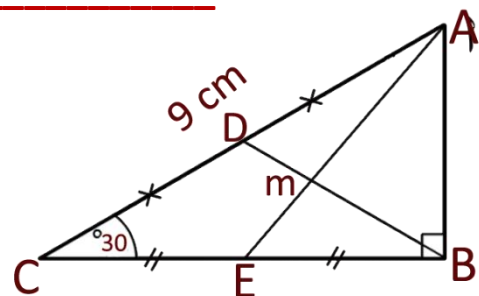
**Prove that:**  $AC > BC$

**B) In the opposite figure:**

$\triangle ABC$  is right at B,  $m(\angle C) = 30^\circ$ ,

D is midpoint of  $\overline{AC}$ , E is midpoint of  $\overline{BC}$

$AC = 9$  cm. Find length of  $\overline{BM}$ ,  $\overline{AB}$



◆◆◆  
 End of the questions



**GEOMETRY – MODEL No****4****Q1** Choose the correct answer:

(1)  $\overline{AD}$  is a median in  $\triangle ABC$ ,  $AD = \frac{1}{2} BC$ , then  $(\angle A)$  is .....

- a) Acute                      b) Right                      c) Reflex                      d) obtuse

(2) If  $D \in$  axis of symmetry of  $\overline{AB}$ , then  $AD$  .....  $BD$

- a)  $\perp$                       b)  $=$                       c)  $>$                       d)  $<$

(3) The triangle with sides 2 cm,  $(X+3)$  cm, 5 cm is isosceles triangle when  $x =$ .....

- a) -1                      b) 2                      c) 3                      d) 4

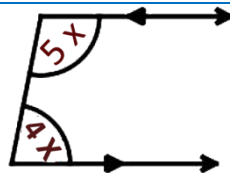
(4) The sum of measures of exterior angles for equilateral triangle =

- a)  $60^\circ$                       b)  $120^\circ$                       c)  $180^\circ$                       d)  $360^\circ$

(5) The intersecting point of the median of triangle divide it with ratio **2** : ..... from the base .

- a) 1                      b) 2                      c) 3                      d) 4

(6) In the opposite figure:  
 $X =$ ..... $^\circ$



- a) 20                      b) 40                      c) 90                      d) 180

**Q2** Complete each of the following:

1) If 3, 4,  $x + 2$  are sides lengths of a triangle, then  $X \in ] \dots, \dots [$

2)  $\triangle ABC$ ,  $AB = AC$ ,  $m(\angle A) = 60^\circ$  and its perimeter = 12 cm, then  $BC =$  .....

3) In  $\triangle ABC$ ,  $m(\angle B) = 90^\circ$ ,  $m(\angle A) = 30^\circ$ , then  $AC =$  .....  $BC$

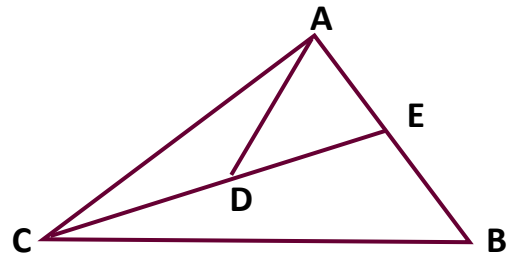
4) The bisector of the vertex angle in isosceles triangle bisect the base and .....

5) In  $\triangle ABC$ ,  $AB = BC$ ,  $m(\angle B) = 50^\circ$ , then  $m(\angle A) >$  .....

**Q3** A) In the opposite figure:

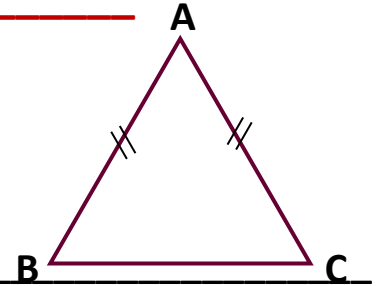
$$AD = CD = ED$$

**Prove that :**  $BC > AC$

**B) In the opposite figure:**

$$AB = AC, m(\angle A) = x, m(\angle B) = 2x$$

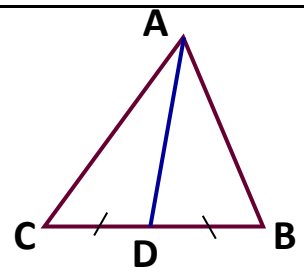
**Find**  $m(\angle C)$  in degree.

**Q4** A) In the opposite figure:

$\triangle ABC$ , D is a midpoint of  $\overline{BC}$

**Prove that:**

Perimeter of  $\triangle ADC >$  Perimeter of  $\triangle ABD$

**B)  $\triangle ABC$ ,  $m(\angle A) = 75^\circ$ ,  $m(\angle B) = 40^\circ$ .**

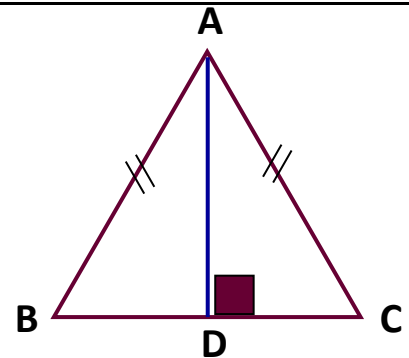
Arrange descending the sides' length of triangle ABC.

**Q5** A) In the opposite figure:

$$AB = AC, \overline{AD} \perp \overline{BC}, AB = 13 \text{ cm}$$

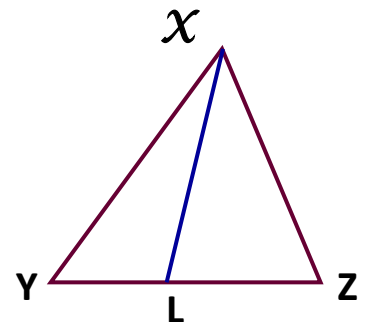
$$BC = 10 \text{ cm},$$

**Find:** ① Length of  $\overline{BD}$   
② Area of  $\triangle ABC$

**B) In the opposite figure:**

**Prove that:**

Perimeter of  $\triangle XYZ > 2 \cdot XL$



◆ ◆ ◆  
End of the questions



**GEOMETRY – MODEL No****5****Q1** Choose the correct answer:**(1)** The number of axes of symmetry of isosceles triangle = .....

- a) Zero                      b) 1                      c) 2                      d) 3

**(2)**  $XA = XB$  and  $YA = YB$ , then  $\overleftrightarrow{XY}$  .....  $\overline{AB}$ 

- a) //                      b)  $\perp$                       c)  $\equiv$                       d) =

**(3)** In  $\triangle ABC$ ,  $m(\angle C) = 65^\circ$ ,  $m(\angle A) = 75^\circ$  then ..

- a)  $AB > BC$               b)  $AB < AC$               c)  $BC > AB$               d)  $AB = AC$

**(4)** If M is the point of intersection of medians of  $\triangle ABC$ , D is midpoint of  $\overline{BC}$ , then  $AD =$  .....

- a) 2 AM                      b) 4 MD                      c)  $\frac{2}{3}$  MD                      d)  $\frac{1}{2}$  AM

**(5)** The set of numbers can be lengths of sides of triangle are .....

- a) {4, 6, 10}              b) {4, 6, 8}                      c) {2, 6, 3}                      d) {4, 5, 10}

**(6)** In  $\triangle ABC$ ,  $m(\angle A) + m(\angle B) < m(\angle C)$ , then  $AB$  ....  $BC$ 

- a) <                      b) =                      c) >                      d)  $\leq$

**Q2** Complete each of the following:

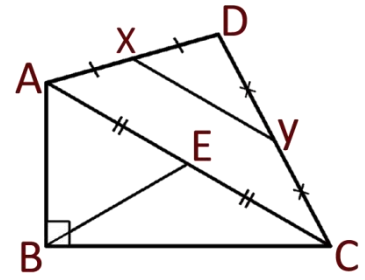
- 1)** In the isosceles triangle, if  $AB = AC$ ,  $m(\angle A) = 70^\circ$ , then  $AB < \dots$
- 2)** In  $\triangle ABC$ , if  $m(\angle A) = 30^\circ$  and  $m(\angle B) = 90^\circ$ , then  $BC = \dots AC$
- 3)** If the measure of two angles in a triangle are different, then the greater in measure of them is opposite to .....
- 4)** If the measure of the vertex angle of an isosceles triangle is  $80^\circ$ , then the measure of each of two base angle equal .....
- 5)** The measure of the exterior angle of the equilateral  $\triangle = \dots$

**Q3 A) In the opposite figure:**

X is midpoint of  $\overline{AD}$ , Y is midpoint of  $\overline{CD}$

E is midpoint of  $\overline{AC}$ ,  $m(\angle ABC) = 90^\circ$

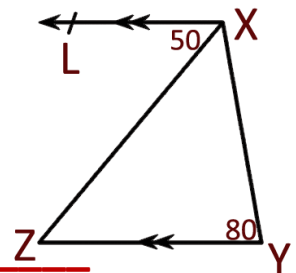
$XY = 6$  cm. Find length of  $\overline{BE}$

**B)  $\triangle ABC$ ,  $D \in \overline{BC}$ ,  $AD = AC$   
Prove that:  $AB > AD$** **Q4 A) In the opposite figure:**

$XL \parallel YZ$ ,  $m(\angle Y) = 80^\circ$

$m(\angle LXZ) = 50^\circ$ .

Prove that:  $XY = YZ$

**B) In the opposite figure:**

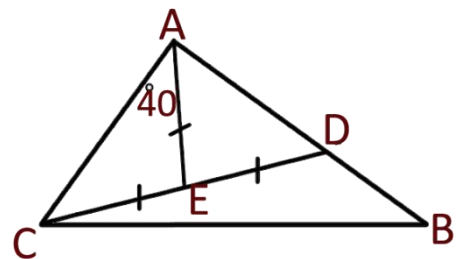
$DE = EC = AE$

$m(\angle EAC) = 40^\circ$

Prove that:

①  $AC > AE$

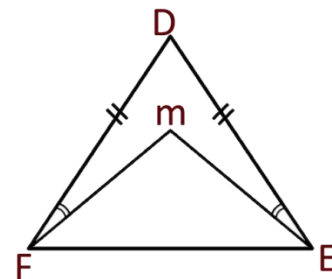
②  $AC < BC$

**Q5 A) In the opposite figure:**

If  $DE = DF$ ,  $m(\angle DEM) = m(\angle DFM)$

Prove that:

$\overrightarrow{DM}$  is axis of symmetry of  $\overline{EF}$

**B) ABCD is a parallelogram, its diagonal intersect at M, draw  $\overrightarrow{BX}$  median in  $\triangle ABD$  cut  $\overline{AD}$  in X,  $\overline{AC}$  in N**

**Prove that:**  $AN = \frac{1}{3} AC$

◆◆◆  
End of the questions

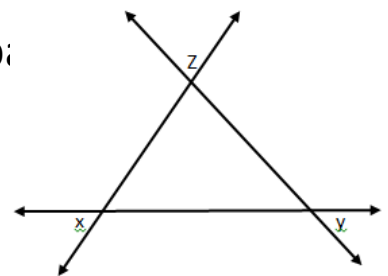


**GEOMETRY – MODEL No****6****Q1** Choose the correct answer:

- (1) The number of axes of symmetry of equilateral triangle = .....  
 a) 3                      b) 2                      c) 1                      d) Zero
- (2) The set of numbers which can be lengths of sides of triangle are  
 a) {5, 3, 8}              b) {4, 6, 12}              c) {2, 6, 3}              d) {3, 5, 5}
- (3) In  $\triangle ABC$ ,  $m(\angle C) = 65^\circ$ ,  $m(\angle A) = 75^\circ$  then ....  
 a)  $AB > BC$               b)  $AB < AC$               c)  $BC > AB$               d)  $AB = AC$
- (4) If  $XA = XB$  and  $YA = YB$ , then  $\overleftrightarrow{XY} \dots\dots\dots \overline{AB}$   
 a)  $//$                       b)  $\perp$                       c)  $\equiv$                       d)  $=$
- (5) In  $\triangle ABC$ , if  $m(\angle B) = 90^\circ$ , D is midpoint of  $\overline{AC}$ , then  $AC = \dots\dots\dots$   
 a) 2 BD                      b) 4 BD                      c)  $\frac{1}{2}$  BD                      d)  $\frac{1}{3}$  AD
- (6) The measures of exterior angle of equilateral triangle = .....<sup>o</sup>  
 a) 60                      b) 120                      c) 180                      d) 360

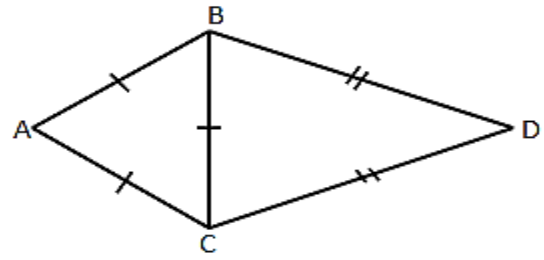
**Q2** Complete each of the following:

- 1) The longest side in the right angled triangle is .....
- 2) The point of intersection of the medians of the triangle divides each median in the ratio 4 : ..... from the b;
- 3) In opposite figure  $X+Y+Z = \dots\dots\dots^\circ$
- 4)  $\triangle ABC$  is an isosceles triangle,  $m(\angle B) = 100^\circ$  then  $m(\angle A) = \dots\dots^\circ$
- 5) In  $\triangle ABC$  if  $AB = 3$  cm,  $BC = 4$  cm,  $AC = X$  cm then  $X \in ] \dots\dots, \dots\dots [$

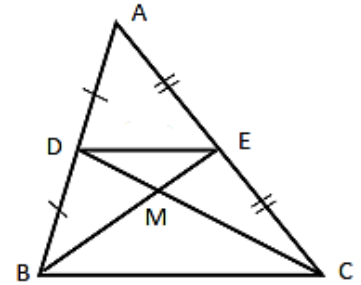


**Q3 [A] In the opposite figure**

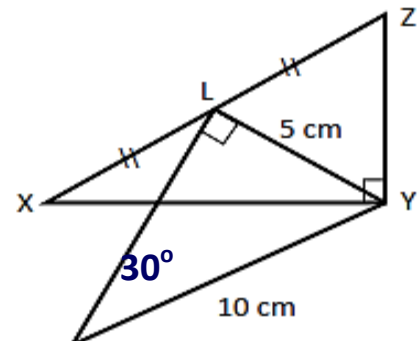
$AB = AC = BC$  ,  $BD = DC$   
 $m(\angle ABD) = 130^\circ$ ,  
**Find  $m(\angle D)$**

**[B] In the opposite figure**

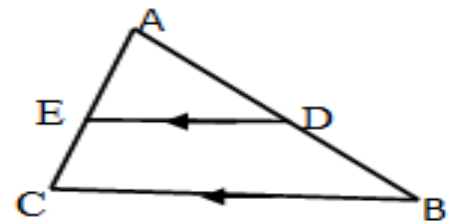
D is midpoint of  $\overline{AB}$  , E is midpoint of  $\overline{AC}$   
 $BM = 4$  cm ,  $MC = 6$  cm ,  $BC = 8$  cm  
**Find the perimeter of  $\triangle DME$**

**Q4 [A] In the opposite figure**

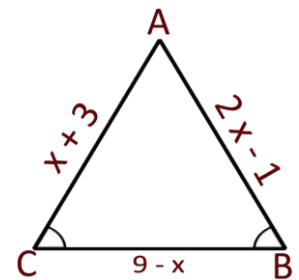
$m(\angle XYZ) = m(\angle HLY) = 90^\circ$   
 $m(\angle H) = 30^\circ$  ,  $LY = 5$  cm ,  $HY = 10$  cm  
 L is midpoint of  $\overline{XZ}$   
**Find the length of  $\overline{XZ}$**

**[B] In the opposite figure**

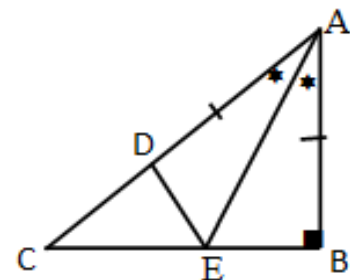
$AB > AC$  ,  $\overline{ED} \parallel \overline{BC}$   
**Prove that:**  $AD > AE$

**Q5 [A] In the opposite figure**

In  $\triangle ABC$ ,  $m(\angle B) = m(\angle C)$   
 $AB = 2X - 1$  ,  $AC = X + 3$  ,  $BC = 9 - X$   
**Find the numerical value of perimeter of  $\triangle ABC$**

**[B] In the opposite figure**

$AB = AD$  ,  $\overline{AE}$  bisects  $\angle BAC$   
 $m(\angle ABC) = 90^\circ$  , **Prove that**  $CE > EB$



◆ ◆ ◆  
 End of the questions



**GEOMETRY – MODEL No****7****Q1** Choose the correct answer:

- (1) If  $\triangle ABC$  is right angled triangle at B,  $AC = 10$  cm,  $BC = 8$  cm, then the length of the median drawn from B = ..... cm  
 a) 5                      b) 6                      c) 8                      d) 10
- (2) The point of intersection of the medians of triangle divides each of them with the ratio of .....from the base  
 a) 1 : 2                      b) 2 : 1                      c) 1 : 3                      d) 3 : 1
- (3) ABCD is a rhombus in which  $AC > BD$ , then  $m(\angle D) \dots m(\angle C)$   
 a)  $>$                       b)  $<$                       c)  $=$                       d)  $\leq$
- (4) If the length of two sides of an isosceles triangle are 3 , 7 cm. then the length of the third side = ..... cm  
 a) 3                      b) 4                      c) 7                      d) 10
- (5) In  $\triangle ABC$ ,  $m(\angle B) = 70^\circ$ ,  $m(\angle C) = 50^\circ$ , then  $BC \dots AC$   
 a)  $>$                       b)  $=$                       c)  $<$                       d)  $\leq$
- (6)  $\overline{AD}$  is median in  $\triangle ABC$ , m is intersection point of its medians,  $AD = 6$  cm, then  $AM = \dots$  cm  
 a) 1                      b) 2                      c) 3                      d) 4

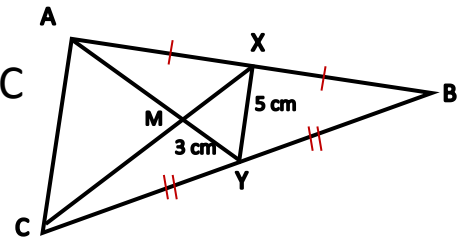
**Q2** Complete each of the following:

- 1) ABC,  $BC = AC$ ,  $m(\angle A) = 2 m(\angle C)$ , then  $m(\angle B) = \dots$
- 2) An isosceles triangle with vertex angle =  $60^\circ$ , its perimeter  $3\sqrt{5}$  cm, then its side length .....
- 3) The vertex angel bisector in the isosceles triangle bisect the base and.....
- 4) In a triangle, If its side lengths is 2 , 4,  $X + 1$  then  $X \in ] \dots, \dots[$
- 5) The length of two sides in the triangle are not equal, then the greater side in length is opposite to .....

**Q3 A) In the opposite figure:**

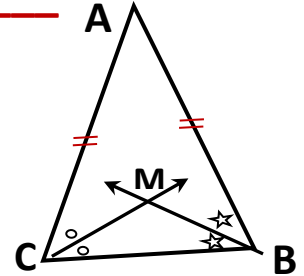
M is the intersection of the medians of  $\triangle ABC$   
 $XY = 5$  cm,  $CX = 12$  cm,  $MY = 3$  cm.

**Find with prove the perimeter of  $\triangle MAC$**

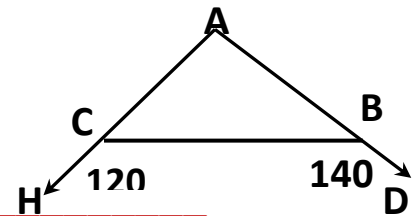
**B) In the opposite figure:**

$\triangle ABC$ ,  $AB = AC$ ,  $\overrightarrow{BM}$  bisect  $(\angle B)$ ,  
 $\overrightarrow{CM}$  bisect  $(\angle C)$ , without using the congruency

**Prove that:**  $\overrightarrow{AM}$  is the axis of symmetry of  $\overline{BC}$

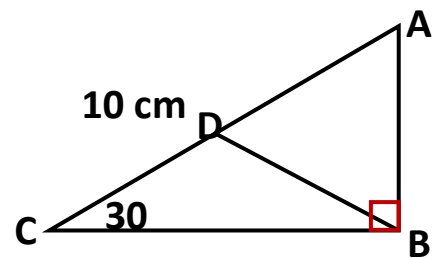
**Q4 A) In the opposite figure:**

$\triangle ABC$ ,  $D \in \overline{AB}$ ,  $H \in \overline{AC}$ ,  $m(\angle CBD) = 140^\circ$   
 $m(\angle BCH) = 120^\circ$ . **Prove that  $BC > AB$**

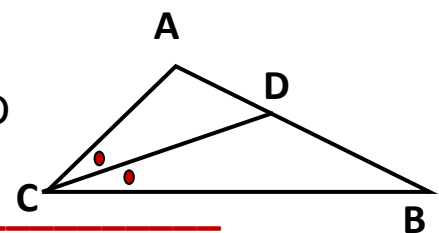
**B) In the opposite figure:**

$\triangle ABC$  right angled triangle at B  
D is midpoint of  $\overline{AC}$ ,  $AC = 10$  cm,  
 $m(\angle C) = 30^\circ$ .

**Calculate the perimeter of  $\triangle ADB$**

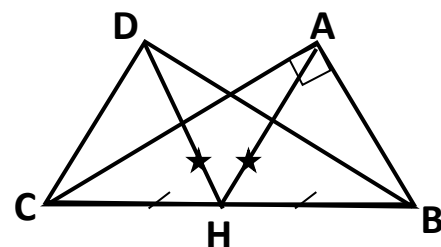
**Q5 A) In the opposite figure:**

$\triangle ABC$ ,  $\overrightarrow{CD}$  bisect  $(\angle C)$  and intersect  $\overline{AB}$  in D  
**Prove that:**  $BC > BD$

**B) In the opposite figure:**

$\triangle ABC$  right angled triangle at A  
H is midpoint of  $\overline{BC}$ ,  $AH = DH$

**Prove that:**  $m(\angle BDC) = 90^\circ$



◆◆◆  
 End of the questions



**GEOMETRY – MODEL No****8****Q1** Choose the correct answer:

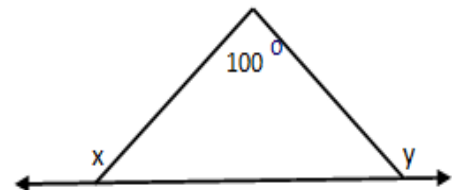
- (1) The triangle which has three axes of symmetry is .....  
 a) scalene      b) isosceles      c) Right angled      d) equilateral
- (2) If the lengths of two sides in an isosceles triangle are 8 cm and 4 cm then the length of the third side is ..... cm  
 a) 4      b) 8      c) 3      d) 12
- (3) In  $\triangle XYZ$ ,  $m(\angle Z) = 70^\circ$ ,  $m(\angle Y) = 60^\circ$  then  $YZ$  .....  $XY$   
 a)  $>$       b)  $<$       c)  $=$       d) Twice
- (4) If  $XA = XB$  and  $YA = YB$ , then  $\overleftrightarrow{XY}$  .....  $\overline{AB}$   
 a)  $//$       b)  $\perp$       c)  $\equiv$       d)  $=$
- (5) If M is the point of intersection of medians of  $\triangle ABC$ , D is midpoint of  $\overline{BC}$ , then  $AD =$   
 a) 2 AM      b) 4 MD      c)  $\frac{2}{3}$  MD      d)  $\frac{3}{2}$  AM
- (6) The measures of exterior angle of equilateral triangle = ..... $^\circ$   
 a) 60      b) 120      c) 180      d) 360

**Q2** Complete each of the following:

- 1) In  $\triangle ABC$ , if  $AB = AC$ ,  $m(\angle A) = 70^\circ$ , then  $AB <$  .....
- 2) In  $\triangle ABC$ , if  $m(\angle A) = 30^\circ$  and  $m(\angle B) = 90^\circ$ , then  $BC =$  .....  $AC$

3) In opposite figure:

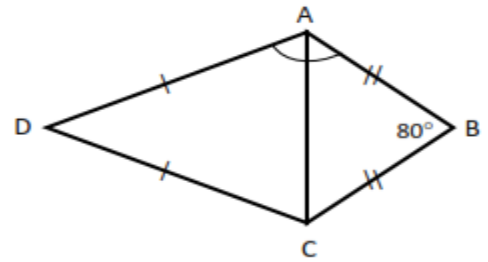
$$X + y = \text{.....}^\circ$$



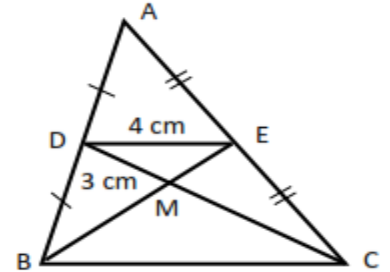
- 4) If the measure of the vertex angle of an isosceles triangle is  $80^\circ$ , then the measure of each of two base angles = .....
- 5) The longest side in the right angled triangle is .....

**Q3 [A] In the opposite figure**

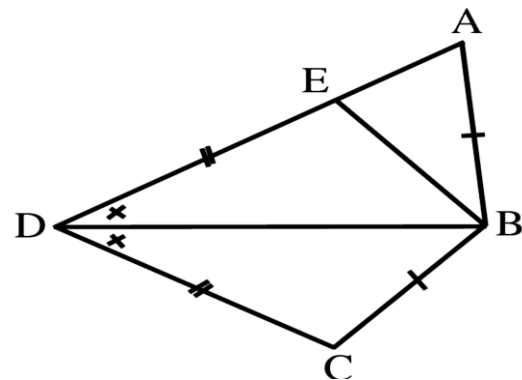
$AD = DC$  ,  $AB = BC$   
 $m(\angle B) = 80^\circ$  ,  $m(\angle BAD) = 114^\circ$   
**Find  $m(\angle D)$**

**[B] In the opposite figure**

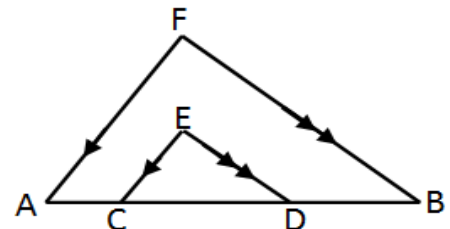
D is midpoint of  $\overline{AB}$  , E is midpoint of  $\overline{AC}$   
 $DE = 4$  cm ,  $DM = 3$  cm ,  $BE = 6$  cm  
**Find the perimeter of  $\triangle BMC$**

**Q4 [A] In the opposite figure**

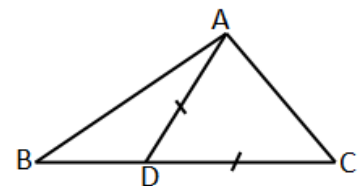
**In the opposite figure**  
 $BA = BC$  and  $DE = DC$  ,  
 $\overline{DB}$  bisects  $\angle ADC$   
**Prove that:**  
 $(\angle A) + m(\angle C) = 180^\circ$

**[B] In the opposite figure**

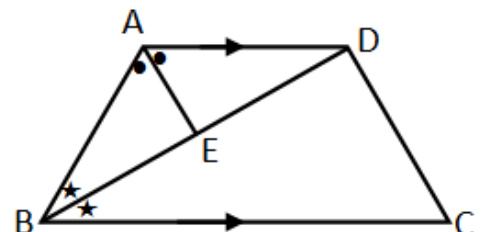
$BF > FA$  ,  $\overline{ED} \parallel \overline{FB}$  ,  $\overline{FA} \parallel \overline{EC}$   
**Prove that:**  $ED > EC$

**Q5 [A] In the opposite figure**

$AD = DC$  Prove that  $BC > AB$

**[B] In the opposite figure**

$\overline{AD} \parallel \overline{BC}$  ,  $\overline{BD}$  bisects  $\angle ABC$   
 $\overline{AE}$  bisects  $\angle BAD$   
**Prove that:**  $\overline{AE} \perp \overline{BD}$



◆◆◆  
 End of the questions



**GEOMETRY – MODEL No****9****Q1** Choose the correct answer:**(1)** In  $\triangle ABC$ ,  $m(\angle A) = 3 m(\angle B)$ , then  $AC \dots\dots\dots BC$ 

- a) =                      b)  $\equiv$                       c) >                      d) <

**(2)** The numbers 5, 4, ..... can be lengths of sides of a triangle

- a) 8                      b) 9                      c) 10                      d) 12

**(3)** If  $\triangle ABC$  is right angled at **B**, then.....

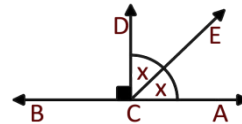
- a)  $AC < AB$                       b)  $AC > BC$                       c)  $AB < AC$                       d)  $BC > AC$

**(4)** If  $A > B$ ,  $C > D$ , then  $A + C \dots\dots\dots B + D$ 

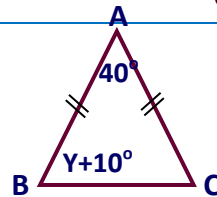
- a) >                      b) =                      c) <                      d)  $\leq$

**(5)** In the opposite figure:Value of  $X = \dots\dots\dots^\circ$ 

- a) 30                      b) 45                      c) 60                      d) 90

**(6)** In the opposite figure:Value of  $Y = \dots\dots\dots^\circ$ 

- a) 30                      b) 40                      c) 60                      d) 70

**Q2** Complete each of the following:

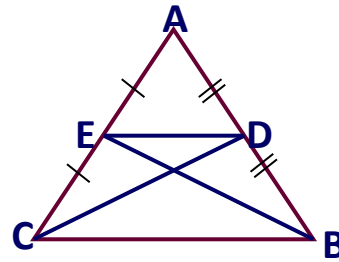
- 1) The point of intersection of the medians of the triangle divides each of them in the ratio of ..... From the base
- 2) The base angles of the isosceles triangle are .....
- 3) The longest side in the right angled triangle is .....
- 4) In  $\triangle ABC$ ,  $m(\angle A) = 60^\circ$ ,  $AB = BC$ , then the number of axes of symmetry of  $\triangle ABC = \dots$
- 5) The measure of exterior angle of the equilateral triangle is .....  $^\circ$

**Q3** [A] In the opposite figure:

$BC = 10 \text{ cm}$  ,  $MB = 5 \text{ cm}$

$MC = 6 \text{ cm}$

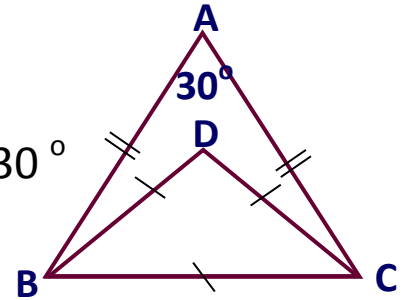
**Find** the perimeter of  $\triangle EMD$



[B] In the opposite figure:

$AB = AC$  ,  $\triangle BDC$  is equilateral ,  $m(\angle A) = 30^\circ$

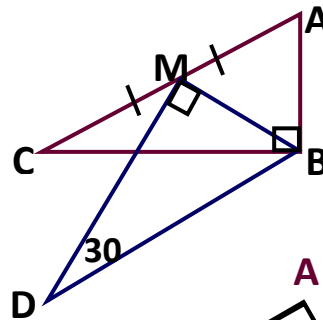
**Find by proof:**  $m(\angle ACD)$



**Q4** [A] In the opposite figure:

**Prove that:**

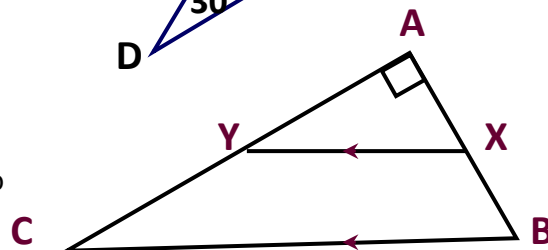
$AC = BD$



[B] In the opposite figure

$AC > AB$  ,  $m(\angle A) = 90^\circ$

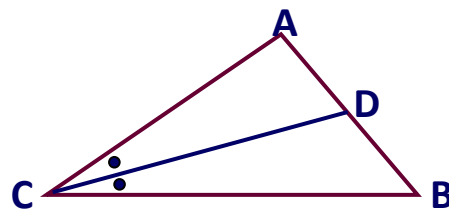
**Prove that:**  $m(\angle AXY) > 45^\circ$



**Q5** [A] In the opposite figure:

$\overline{DC}$  bisect  $\angle ACB$

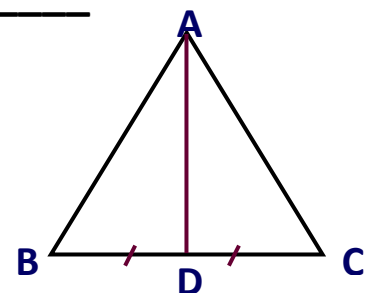
**Prove that:**  $BC > BD$



[B] In the opposite figure

**Prove that:**

Perimeter of  $\triangle ABC > 2 AD$



◆◆◆  
End of the questions



**GEOMETRY – MODEL No****10****Q1** Choose the correct answer:

(1) The point of intersection of the medians of triangle divides each median in the ratio ..... from vertex.

- a) 1 : 2                      b) 3 : 2                      c) 2 : 3                      d) 4 : 2

(2) In  $\triangle ABC$ , if  $m(\angle C) = 80^\circ$ ,  $m(\angle B) = 30^\circ$ . then  $AC$  .....  $BC$

- a) =                      b) <                      c) >                      d)  $\leq$

(3) The axis of symmetry of a line segment is straight line .....

- a) Perpendicular to it                      c) Parallel to it  
b) Bisects it                      d) Perpendicular at midpoint

(4) In any triangle,  $XY + YZ - XZ$  ..... zero

- a) >                      b) <                      c) =                      d)  $\leq$

(5) An isosceles triangle in which the lengths of two of its sides are 4 cm and 9 cm then the length of the third side equals .....

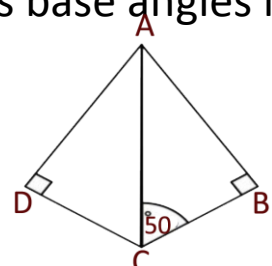
- a) 4                      b) 5                      c) 9                      d) 13

(6) If  $AB \cap CD = \emptyset$ , then  $AB$ ,  $CD$  are .....

- a) Coincides    b) Perpendicular    c) Intersecting    d) Parallel

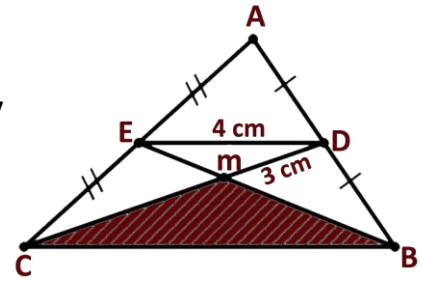
**Q2** Complete each of the following:

- If measure of an angle of an isosceles is  $60^\circ$ , then the triangle....
- The bisector of vertex in an isosceles triangle ....., .....
- In  $\triangle XYZ$ , if  $m(\angle X) = 50^\circ$ ,  $m(\angle Y) = 60^\circ$ , then the triangle has ..... Axes of symmetry
- In isosceles triangle, if the measure of one of its base angles is  $40^\circ$ , then the measure of its vertex ..... $^\circ$
- In the opposite figure:  
 $\triangle ABC \equiv \triangle ACD$ ,  $m(\angle CAD) =$  .....

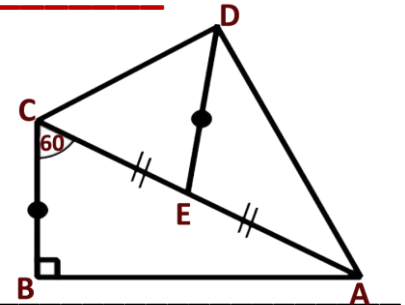


**Q3 A) In the opposite figure:**

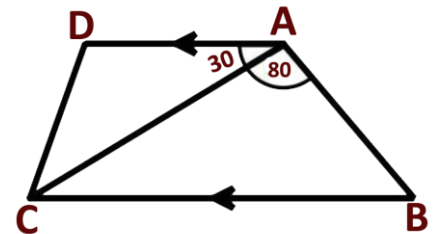
D, E are midpoints of  $\overline{AB}$ ,  $\overline{AC}$  respectively  
 $\overline{BE} \cap \overline{CD} = \{m\}$ . if  $DE = 4$  cm,  $DM = 3$  cm  
 $BE = 6$  cm. Find perimeter of  $\triangle BMC$

**B) In the opposite figure:**

$m(\angle B) = 90^\circ$ ,  $m(\angle ACB) = 60^\circ$   
 $\overline{DE}$  is median in  $\triangle DAC$ ,  $BC = DE$   
 Prove that:  $m(\angle ADC) = 90^\circ$

**Q4 A) In the opposite figure:**

$\overline{AD} \parallel \overline{BC}$ ,  $m(\angle BAC) = 80^\circ$ ,  
 $m(\angle DAC) = 30^\circ$   
 Prove that:  $BC > AC$

**B) In the opposite figure:**

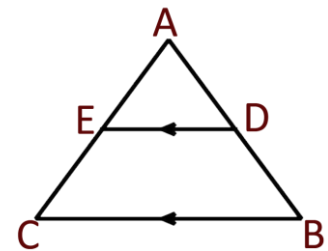
Arrange ascending the measures of  $\triangle ABC$  where:  $AC = 12$  cm,  
 $BC = 13$  cm, perimeter of  $\triangle ABC = 30$  cm

**Q5 A) In the opposite figure:**

$\triangle ABC$ ,  $\overline{DE} \parallel \overline{BC}$ ,  $AD = AE$

Prove that:

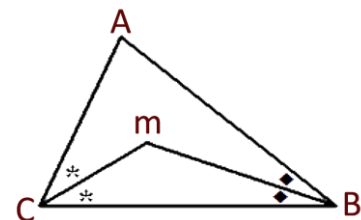
- ①  $AB = AC$       ②  $DB = EC$

**B) In the opposite figure:**

$\triangle ABC$ ,  $AC > AB$

$\overrightarrow{BM}$  bisects  $(\angle ABC)$ ,  $\overrightarrow{CM}$  bisects  $(\angle ACB)$

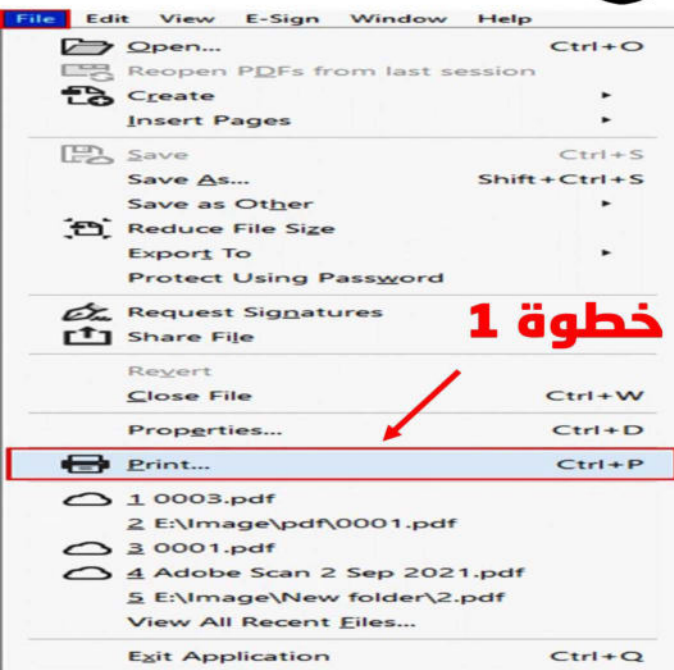
Prove that:  $MC < MB$



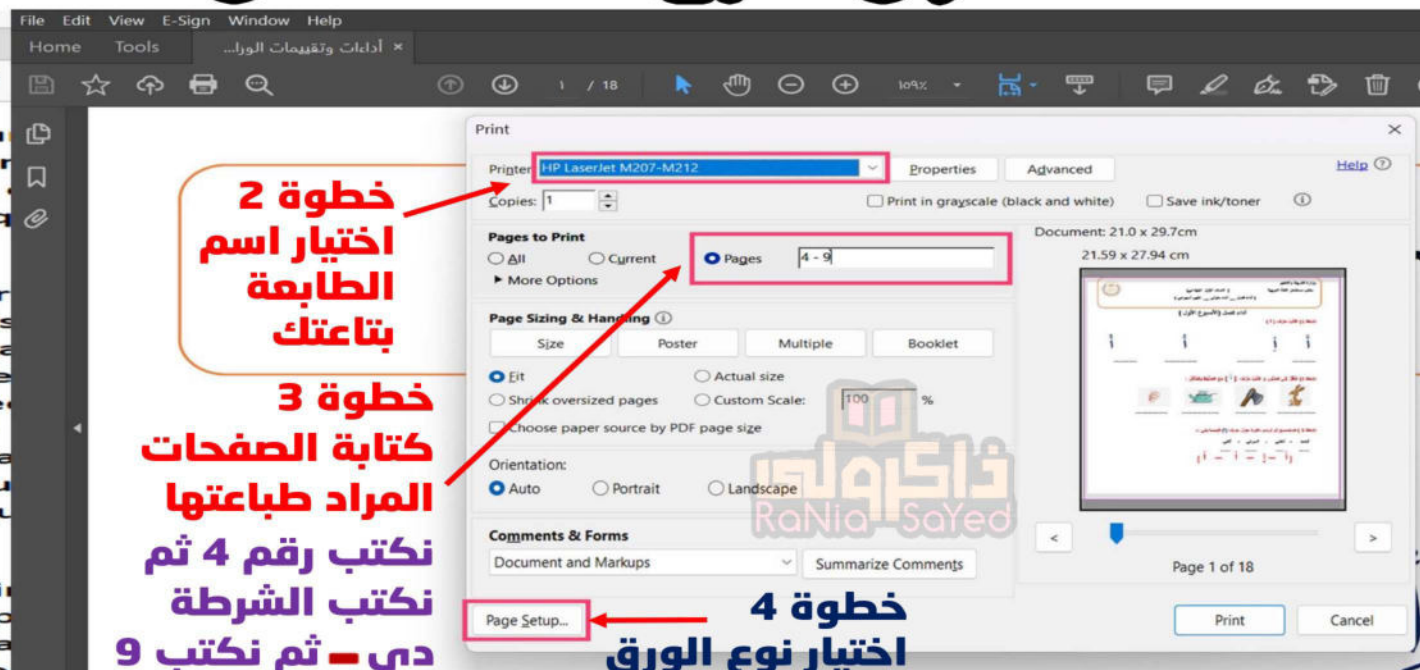
◆◆◆  
 End of the questions

# كيفية طباعة صفحات معينة من ملف معين

## مثلا ازاي نطبع الصفحات من صفحة 4 الى صفحة 9



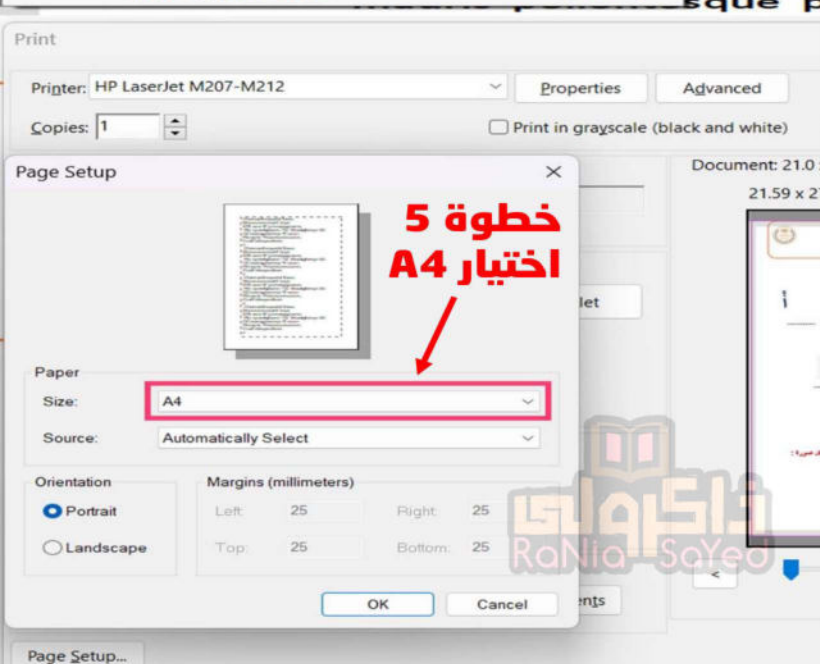
خطوة 1



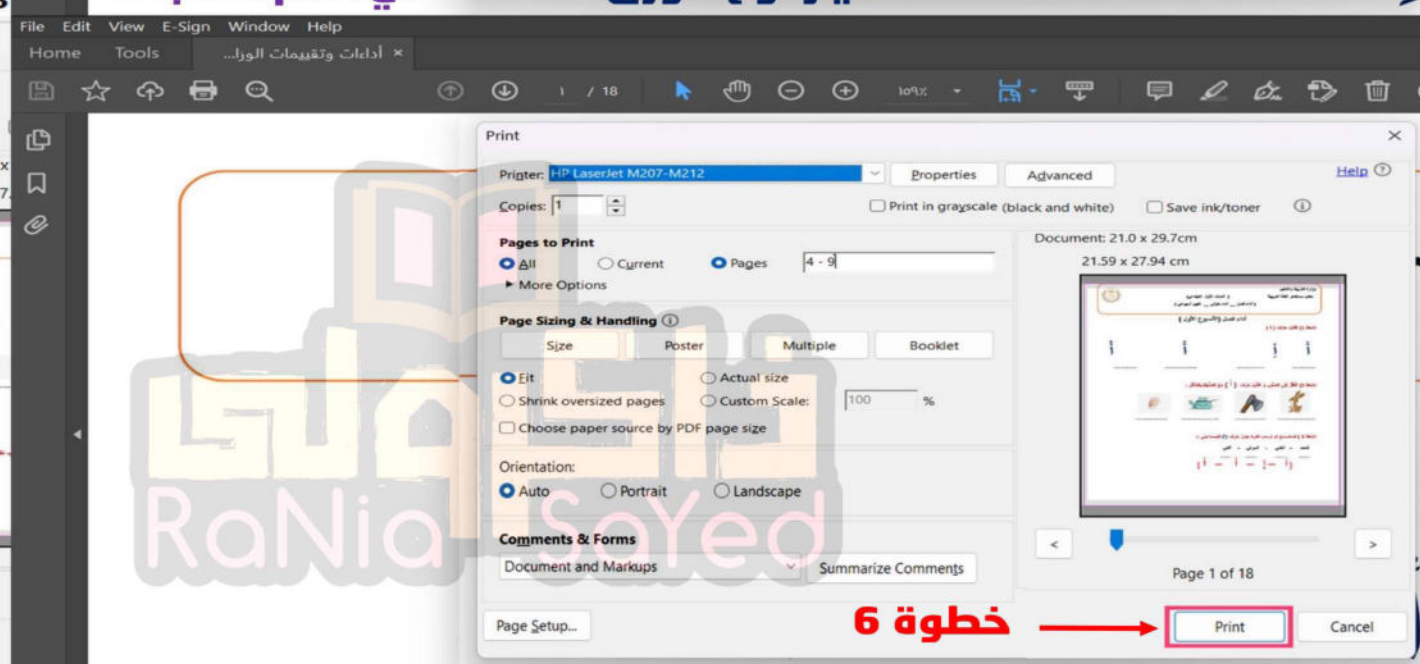
خطوة 2  
اختيار اسم  
الطابعة  
بتاعتك

خطوة 3  
كتابة الصفحات  
المراد طباعتها  
نكتب رقم 4 ثم  
نكتب الشرطة  
دي - ثم نكتب 9

خطوة 4  
اختيار نوع الورق



خطوة 5  
اختيار A4



خطوة 6